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# The Bulletin

## OF THE NATIONAL ASSOCIATION OF Secondary-School Principals

*A Department of Secondary Education of the  
NATIONAL EDUCATION ASSOCIATION  
Issued Monthly, October to May Inclusive*

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April, 1943

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#### **THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS**

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**1201 Sixteenth Street, N. W., Washington, D. C.**

## *Special Notice to High Schools*

### Broadcasting My Part in This War

BEGINNING April 20 and running through May 18 the Mutual Broadcasting System will put on the air five weekly programs based on *My Part in This War*. Each program will begin at 3:15, Eastern War Time, on Tuesday afternoons and last for fifteen minutes.

In the broadcasts, Dr. Thomas H. Briggs, of Teachers College, Columbia University, DIRECTOR OF THE CONSUMER EDUCATION STUDY, will briefly discuss the important topics of our war-time economic program and present a small number of questions for discussion, looking toward intelligent understanding that will lead to more effective co-operation on the home front.

Schools are urged to form student groups to listen to the broadcasts and then to discuss the questions that are raised by the speaker, by the students themselves, or by their leader. If they have studied, or even if they have merely read, the monograph *My Part in This War*, they will be prepared for more effective listening and discussion.

The proposed program will be an important contribution to the development of national morale based upon understanding.

Although Mutual will broadcast these programs over its entire national network, each station has the option of using them or not, just as it sees fit. It is likely to do so if you will see or telephone the manager and say that you wish the broadcast for your students, and especially if you will use your influence to get the superintendent and principals of other schools to do so.

Mutual is trying the experiment of broadcasting these programs to see if the school people of this nation wish serious material for their students. If your co-operation makes the experiment successful, we may expect other similar programs next year. Much depends on you.

If Tuesday afternoon at 3:15, Eastern War Time, does not suit your convenience, the manager of your local station may be induced to make a recording and to rebroadcast it at an hour more convenient for your students.

You may be able to arrange with the manager of your local station to broadcast one or more of the discussions by your student group. Such a broadcast would certainly interest parents and other adults of the community and thus extend your school's influence in its effort to popularize understanding of the national economic program.

THE NATIONAL ASSOCIATION OF SECONDARY-SCHOOL PRINCIPALS will appreciate it if, after you have ascertained that your local station will carry these programs, you will give the widest publicity to them, through announcements to your school and through your local newspapers. This is something that you can do to help on the home front.

G. H.  
P. B. C.  
Aug. 27, 1943.

## Norway Fights On

SIGMUND SKARD

*Library of Congress, Washington, D. C.*

*An address that was to have been given at the annual banquet of the convention at St. Louis on February 27, 1943, by Dr. Sigmund Skard, a prominent Norwegian writer and scholar. Dr. Skard was formerly a teacher of literary history at the University of Oslo and was Librarian of the Royal Academy of Trondheim, Norway, at the time Germany invaded Norway. After some time in occupied Norway, he escaped through the enemy lines on skis over the mountains to Sweden. An adventurous journey through Russian and Japanese territory culminated in America.—Editor*

THIS WAR is making the world smaller than it was before; and it will never be large again. Differences and distances, which seemed important a few months ago, are of little avail now. Nations divided by thousands of miles suddenly are close to each other, fighting shoulder to shoulder for basic principles of life. Russian peasants and Chinese coolies, Yugoslavian snipers and bombed British children are welded together in one single fighting team, in a community of ideals.

In this world-wide democratic front, Norway has come to play a greater part than could be expected from a small nation in a corner of Europe. In few nations was democracy so well developed before the war; and hardly anywhere had its principles penetrated so deeply into the people's mind. The reasons for this were many. The country had a homogeneous population of moderate size and a relatively simple economic life; it had lived in uninterrupted peace for more than a century. By national growth democracy had become general in Norway. It not only worked in the political field, but in social and economic life as well, restricting the freedom of the few in order to create equality for the many. Gradually a spirit of collaboration had developed, which softened the contrasts. It made possible in Norway a higher and more even living standard than in most European countries. The whole political and intellectual tradition of the people was instrumental in building up this way of living; and in keeping and developing the heritage, the schools played an all-important part. Democracy had become a matter of personal concern to the Norwegians. They believed in their social system, and in its possibilities of further development.

The idea of collaboration marked their international attitude. It was a matter of course for Norwegians to believe in fair play among the nations, in peace and disarmament. In a world armed to the teeth, they tried to isolate themselves in the hope that their country should remain a refuge to peace,

even if the rest of the world should be engulfed by the war. Even now, the nation is not regretful of this attitude. In the long run the intellectual armament built up in the time of peace has proved to be more important to resistance than tanks and guns. When the Germans came to Norway, it wasn't necessary to begin building morale. It wasn't necessary to tell the average man and woman that it is better to fight for democracy than to live under any kind of dictatorship. They knew that already from their own life.

#### HITLER INVADES NORWAY

To this Norway the Germans came, April, 9, 1940.

The attack was as sudden as that on Pearl Harbor. The most important ports and the main arsenals were taken during the first night of fighting; not by treason, but by the overwhelming might of the onslaught. The situation seemed totally hopeless. In spite of this the government decided that the country should fight. When, after two months of gallant resistance the army had to capitulate—the King, the government, and the staffs left Norway. They continue active resistance from abroad. A new army and air force has been built up, and a new navy fights with the Allies on the seven seas. The government took over the huge merchant marine, one of the largest and most modern in the world, and it plays a major part in the battle of supplies all over the globe. But still more important to the future of the Norwegian nation is the fight in Norway itself.

From the first days of occupation the Germans clamped on Norway their elaborate system of oppression. They abolished all political freedom, broke down the local self-government, meddled with the courts, dissolved the organizations. They looted the country mercilessly of all valuables, they drafted the manpower for forced labor, and, with the assistance of the handful of Quislings, they started out to "change the mentality of the nation," interfering with cultural life in all its aspects. They backed their moves with reckless brutality, censorship, secret police, imprisonment, concentration camps, tortures, and executions.

#### NORWEGIAN RESISTANCE

In the beginning, the Norwegian resistance was spontaneous. Attempts were made to isolate the Germans and counteract their orders. The dry Norwegian humor was helpful here. Everybody felt and acted as the young girl who refused to dance with a German officer in a restaurant. When asked if she did so because he was a German, she replied: "No, just because I am a Norwegian." In a thousand ways life was made intolerable to the "guests"; by inobtrusive means the population was able to tell them what they really thought about them. They boycotted the propaganda, leaving the speakers alone in the big halls; they hampered the movements of the Germans in every way imaginable. From these beginnings an organized resistance gradually

created itself. Thousands of independent groups sprang up. Even now they usually have no definite knowledge about each other; but they co-operate with utmost precision, in common action.

The result is a general inefficiency of the Nazi administration. Norway does not fit into the way of the New Order. The officials refuse to obey the regime. Thousands have been discharged and are left to starve, but, in secretive ways, they are always helped. The whole judicial system has broken down; the Supreme Court resigned in a body as a protest against the arbitrariness of the Nazis. Organizations of all kinds cease to function. Boards resign and members leave. There is a general sports strike—no games and competitions. When clubs have been forced to arrange something, the results have been so poor as to become the laughing stock of the country. The Church, which was previously supported by public means, solemnly broke its connection with the State and denounced Nazism as contrary to all Christian principles. The boldness of the underground service is amazing; several times condemned prisoners have been spirited away from the concentration camps under the very noses of the Gestapo.

In spite of the German efforts to keep the country isolated, the fighting spirit has been on the up-swing ever since the occupation. The Norwegian public is kept constantly up to date about the happenings in the world, and the people clearly feel they are a fighting United Nation. As early as July 4, 1941, almost half a year before Pearl Harbor, the German police had to disperse a tremendous demonstration in Oslo in front of the Lincoln Memorial. Those Norwegians knew what they were celebrating on the Fourth of July.

The Germans have only one answer—increase brutality. The documentary reports which were recently brought out by the Norwegian Department of Justice in London give the well-known picture of tortures and bestial cruelty, wiping out of whole communities in reprisal, and wholesale execution of hostages. In the town where the author of this article used to live, a town of fifty thousand inhabitants, thirty-four hostages were shot in the month of October last year—shot for things they could not possibly have done, because most of them were in prison when it happened.

But this method doesn't work in Norway; it doesn't work anywhere. The insane brutality makes the issue clearer, the fight more determined, the will to win still more unbreakable.

#### EDUCATION FIGHTS TOO

All the time the schools have played an important part in this fight. Long before the invasion the Norwegian educators were aware of the morbidity of the educational ideas of Nazism. When the Germans occupied the country, the teachers became the vanguard of resistance.

So clear and determined was the opposition, that for more than a year

the Germans made no serious move against the school system. When the teachers were asked to sign declarations of loyalty to the Nazis, they answered by signing a common statement to the effect that now, as before, they intended to obey all legal orders given by legal authorities. When a "revised edition" of the catechism was published by the Nazis, the book was just ignored. When the colleges were asked to admit Nazi speakers, they refused "because it would be against the general purpose of the schools—to create independent thinking."

Teaching in Norway became a course in Anti-Nazism, frankly underlining the democratic traditions of the country. Even children in elementary schools staged tremendous demonstrations in the streets against the Germans and had to be dispersed by the police. The college youths eagerly engaged in all kinds of underground work. Attempts to win the university students resulted in a total failure. Out of 1,200 medical students in Oslo, only twelve agreed to study in Germany, in spite of great advantages offered them. All over the country the students were unanimously backed by their parents and encouraged to resist. More than ever the nation felt the school was an instrument of its vital interests. The final test has come during the last year when the attitude of the educators has become the main example of the utter futility of the German oppression.

In the spring of 1942 the Nazis decided to break the resistance of the schools; they ordered all Norwegian teachers to join the Teacher's Union of the party, and ordered all children between ten and eighteen years to join the Nazi Youth Movement. Practically all teachers left their jobs in protest. Regular teaching now is continued in the homes of the teachers and the parents. In a proud declaration to all students the teachers announced that regular classes probably would not be resumed "for the duration." They asked them to continue their studies alone, with their own books; thus preparing themselves for the important tasks awaiting them in their country's service.

In order to intimidate the teachers, the Germans then arrested 1,100 of them. Five hundred of the men teachers, many of the older ones, were picked out for torture. They were kept for a week in a concentration camp and subjected to strenuous drills and punishments. They were forced to creep on their stomachs through ice water, snow, and slush, while keeping their hands on their backs; they were made to transport snow on broom handles or with bare hands, or move a woodpile from one part of the camp to another and back again. Then they were sent northwards, a trip of thirty hours in cattle cars, packed so tightly that they were unable to sit down. En route they were transferred to an old, condemned ship which had accommodations only for two hundred. In this ship the teachers, many of them seriously ill, were transported to the far north of Norway, on the Arctic coast—a voyage of two weeks of indescribable suffering—in order to build fortifications with the Russian war prisoners.

This experience did not break them or make them surrender. Before they left, they stated their position in a joint declaration which was read to all school classes all over Norway—a declaration and pledge which states, in simple words, for what kind of life the United Nations are fighting.

*The teacher's duty is not only to give the children knowledge. He must also teach the children to have faith in, and to earnestly desire that which is true and just. Therefore, he cannot, without betraying his calling teach anything against his conscience. He who does so sins both against the pupils he is supposed to lead and against himself. This, I promise you, I shall not do. I will not call upon you to do anything which I regard as wrong. Nor will I teach you anything which I regard as not conforming with the truth. I will, as I have done heretofore, let my conscience be my guide, and I am confident that I shall then be in step with the great majority of the people who have entrusted to me the duties of an educator.*

#### NORWAY CONTINUES THE FIGHT

It would not be truthful to say that the Norwegians see this determined resistance only with joy. Since 1814 they have lived in peace; they know what peace does for a nation and what it builds up. It has made them believe deeply and sincerely in the principles of collaboration, of good will and understanding between nations and races, classes and groups of all kinds. It is hard to see this attitude destroyed and to see the nation again forced to think in terms of violence and brutality.

The people of Norway had no choice, just as the Americans had no choice. Out of the thousand questions of everyday life one single question is left: Have you the force to resist? Have you the force to exist? The Norwegians have proved that they have. They know that if they choose to fight instead of surrendering, they fight on today with their Allies all over the globe against war and against the principles of morbidity and destruction for a life that is worth living, founded on freedom and justice for all. They are determined to fight for those principles which have proved their value in peace-time Norway. One hope is living in the Norwegians, as in all occupied nations, during this long and terrible night—that, when the war is over, we are not going to forget *this* time in making the peace the kind of world which lived in our dreams while we fought.

It was stated admirably by an American student, as early as November 1941, writing in the newspaper of the students of the University of Pennsylvania: "We know that many of us will never come back. And we know that those who do will suffer tremendous privations. But we also know that there will be a country to come back to, futures to look forward to, ambitions to be realized, and freedom to be enjoyed."



## Far Eastern Studies for American Youth\*

CHRISTIAN O. ARNDT

*Specialist in Far Eastern Education, U. S. Office of Education, Washington, D. C.*

A RECENT STUDY of county, city, and state educational programs on file in the U. S. Office of Education afforded the writer an overview of the work which is being done on the Far East in our public schools on the elementary and secondary levels. To be sure, much of the work which has actually been done in classrooms in recent years has not been recorded in the published programs of study. Furthermore, but few contemporary programs for 1942-43 have been published at this time, and there is evidence to warrant the assumption that Far Eastern studies are receiving a new emphasis during the present school year. Thus, while the picture gained is valuable as an overview, it is but an overview.

What, then, according to this overview, is the status of Far Eastern studies in American public schools? With a few exceptions, it is still deplorably weak. Many well-developed units of study and outlines were found which deal with the Indian, the Eskimo, and with primitive peoples, but such centers of world population as India, China, Japan, and the East Indies, were too often not even mentioned. In many cases, moreover, when the various countries of the Far East were studied, the emphasis was largely upon unrelated facts and the unusual and unique in life and customs. Rarely was consideration given to social problems and issues. The importance of the countries studied for the present and future development of the United States and for sounder international relations generally, was either overlooked or so much subordinated to scattered, often inaccurate, data that their import was greatly weakened. What can be done to remedy this condition?

Before addressing ourselves specifically to the job of curriculum construction in the area of Far Eastern studies, it would appear desirable that we consider certain overall, general approaches. We shall give brief thought to the need for two, namely, (1) *a continuous, critical examination of the on-going school program to the end that cognizance be taken of significant changes in our unfolding community and world*, and (2) *a frame of reference against which to screen proposed curriculum changes*.

### NEED FOR CONTINUOUS, CRITICAL EXAMINATION

The need for a continuous, critical examination of the on-going school program to the end that significant changes in our way of life be studied is

\*A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.



based upon the assumptions that our society is ever in a state of flux and that the school program must be centered in this evolving society and both reflect and condition its evolution. The import of these assumptions for education in a democratic society is immeasurably greater than for any other form of society since the functioning of its social, economic, and political life is based upon them. If, therefore, the school would serve not only as interpreter, but even as a builder for democracy, it must ever be close to or on the frontier of our society. Unless this is true the school will retard progress and serve as an agency for developing social lags.

The responsibility for maintaining this constant watchfulness for significant changes in our society to the end that they be included for study in the public school curriculum is not the exclusive function of any one individual within a school system or within a given community. It is the responsibility of every faculty member, and, ideally, of every parent. Too often this function is served by a principal, superintendent, or curriculum director while faculty members rest content in the belief that the work is being done and that they need not therefore be concerned. In order to take effective action it is, of course, necessary to organize and delegate responsibilities; however, this process must glean the thinking of every faculty member if it is to function democratically.

Let us assume that we have in a given school and community a situation in which the faculty is not only socially sensitive, but concerned as well with doing something about the issues or problems in its community or larger world that appear to be really significant. Before actual changes are made in

#### FRAME OF REFERENCE

the school curriculum, how shall this faculty determine whether a proposed change is desirable or not, or whether it is more desirable than other changes which are under consideration? A system of values, a sense of direction, a frame of reference, these are needed as guides to curriculum builders in any society. Democracy is no exception. Whence shall we derive our frame of reference?

There is but one source from which a frame of reference may be derived by a school in a democratic society, namely the values toward the realization of which democracy is striving. Included in these values are the strivings of yesteryears as well as those of the present and the envisioned future. They have been externalized in such documents as the Bill of Rights, the Declaration of Independence, the Emancipation Proclamation, and, more recently, in the Four Freedoms which are also rather commonly referred to as the Atlantic Charter.

The values expressed in this rather formidable and formal array of documents need to be reduced to more functional language and concepts to serve the purposes of our present discussion. This is, we believe, well done in

the following expression of its philosophy by the faculty of the Denver Public Schools.<sup>1</sup>

In formulating its philosophy, a school must determine its own beliefs concerning the nature of the individuals with whom it works and the character of the society which it serves. The Denver Public Schools regard human beings as dynamic and purposive, with a capacity for growth and the ability to develop through experience. The schools of Denver believe that a democratic society is the society most congenial to the optimum development of such individuals. Democracy, so conceived, is a way of life. This includes at all times (1) the free play of intelligence, (2) respect for the worth of individuals, that is, placing human values first, and (3) the participation of all individuals in social living, which is broadly interpreted to include all human relationships.

The chief function of the schools in a democracy is to conserve and improve the democratic way of life. The Denver Public Schools maintain that they can best undertake such a responsibility by:

1. making the life concerns of pupils the central theme of the curriculum;
2. recognizing that individual concerns and social concerns are interdependent;
3. making functional guidance an integral part of all educational activities;
4. evaluating the school program in terms of the personal and social growth of pupils;
5. organizing the school program to reveal the relationships of learning;
6. providing a close, direct, working relationship with the community.

This philosophy has guided the Denver schools in setting up the objectives of their program. . . .

That this philosophy, weak though it may be in its expressed concern about the larger world, is derived from the democratic tradition is apparent.<sup>2</sup> The local school will wish to develop its own philosophy, but the same frame of reference will be employed if it is to give expression to the ideals of American democracy.

It is the belief of the writer that the study of the Far East when squared with the above overall general procedures will eventually receive consideration in many American schools. Due to the critical nature of our Far Eastern relations, this has happened with dramatic suddenness in a number of situations. The effect of the bombing of American citizens and territory, together with the subsequent entry of the United States into war, was so far-reaching and epoch-making that it could escape the attention of no man or woman living in this country. The way of life of all of us was placed in jeopardy. And this condition was brought about by attack upon our territory by an

<sup>1</sup>Aiken, Wilford M., *The Story of the Eight-Year Study*. New York: Harper & Brothers, 1942. pp. 32-33.

<sup>2</sup>The concept "community" in point six above, includes the larger world, although this is not explicitly stated here.

unfriendly Far Eastern power. Over night our people became Far East conscious. Repercussions penetrated into the classroom and were accorded consideration by at least some teachers.

It should be stated parenthetically that this sudden recognition of the importance of the Far-East in American life is ominous. It is obvious now that if our agencies for the discovery of significant developments in our world had been really socially sensitive and equipped with effective agencies for the implementation of recommended changes, we would not have waited for Pearl Harbor. A corollary to this statement is that the cessation of war may mark the cessation of Far Eastern studies or their sharp curtailment unless the teaching profession becomes far more discerning.

#### SPECIFIC PROPOSALS FOR CURRICULUM BUILDING

But what are some of the specific proposals for curriculum building in the Far Eastern area? The following are submitted for the consideration of the reader.

1. *Far Eastern studies should be emphasized and developed to a degree consonant with the long-term importance of the Far East in American life.*

The sudden and large development of the study of any foreign country in our public schools is fraught with many hazards. If strong emphasis is accorded a given country only during periods of war and stress, the long-range effect cannot be otherwise than detrimental. The people of the country in question, as well as our own people, will ask, and rightly so, "Why is this country studied only in times of war and crisis and forgotten in time of peace? The civilization of this country develops more significantly and can therefore help you more in days of peace." Have we not heard words to this effect from our neighbors to the south on repeated occasions?

At this point, extended argument might be made to prove the long-range importance of the Far East in American life. That importance, apparent at the moment due to the war, may be lost sight of once again when peace returns. We have already pointed out that Pearl Harbor proved to our people the seriousness of our neglect to study and understand the Far East. This country cannot afford to let this mistake be repeated. It is the Far East—China, India, Japan, and Java—which maintains more than half of the world's total population and has done so for centuries. If these great countries, rich not only in human and cultural resources but natural resources as well, turn toward Fascism, toward the development of military might rather than the progressive physical and mental liberation of the individual, we shall be unable to maintain the way of life that is ours today and that we envision for the future. On the positive side, the lines of communication between the peoples of the world are so closely drawn today that we may seek out those peoples with whom we can work for the realization of common purposes.

The millions of Russia, of China, of India, and of other Far Eastern countries, will have to assume a new importance for us in the future if our alleged concern for the emancipation of the common man will not be restricted to Americans, but will encompass all men of good will.

2. *The Far East should be studied in a context which is appropriate and meaningful to the learner, regardless of subject or course titles.*

An examination of the course titles which have found their way into the public school curriculum since the turn of the century lends insight into the nature of our unfolding social and political world. The first World War, for instance, marked a sharp increase in the study of French and Spanish, while the study of German declined decidedly. More recently, with the advent of the defense program, the study of industrial arts was accorded a new status of respectability.

It would be unfortunate if the present publicly-felt need for Far Eastern studies would result in the large development of specialized courses on the Far East in our public schools. This method would appear undesirable because it would place the Far East into the category of elective courses and thus force it to compete with other electives. Only students who chose to elect the Far East for study would then have the opportunity to learn about it under the direction of the school.

The contributions of Far Eastern culture to American life are many and varied. Moreover, they are continuous. They call for consideration in many courses now found in the public school curriculum, and it is only our lack of understanding which thus far has kept them out. Would not an English high-school class, for example, find it interesting, whether in time of war or peace, to read Lin Yutang's *Moment in Peking* and *A Leaf in the Storm* or Pearl Buck's *Good Earth* or Tien Chun's *Village in August*? Again, on the junior-high level, would not Adet, Anor, and Mei-Mei Lin's *Our Family* and *Dawn Over Chungking* hold the attention of many pupils in the English class? And what child in the elementary grades could resist Thomas Handforth's *Mei Li*? But we are thinking only of English classes! What about other classes?

The geography of Japan, China, India, and the East Indies is *terra incognita* even to most of us adults, except as the war lifts Yunnan, Java, and the Solomons out of obscurity through the agency of newspaper maps. The geography teacher will find Chester Lawrence's *New World Horizons* stimulating both as to text and picture map illustrations. The Far East is given due consideration. The *Picture Maps of China, India, and Japan*, published by the Friendship Press, will be of particular interest to elementary school teachers. George Cressey's *China's Geographic Foundations* will interpret the geography of China in a thoroughgoing, interesting way. American history classes will today wish to study our relations with Japan, China, and

the Philippines from the present back to our first contacts with those countries. The reasons for our present alliance with China will thus be clarified, as well our relationships with Japan and other Far Eastern countries.

Having gained some measure of factual background from reading and study, most pupils and teachers would wish to discuss such questions as the following:

- 1) Shall lost colonies be restored to the membership of the United Nations?
- 2) What is the nature of our country's responsibility for India?
- 3) What is Japan fighting for in this war?
- 4) What are the leading post-war problems for China in the event of the defeat of the Axis?

Comparable extensions and enrichments might be made in art, music, and general education courses. The millions of Asia are struggling with many of the same problems that concern us today, and their evolving solutions are therefore of definite importance to us. Moreover, they have, through the centuries, expressed their philosophy through various art media and continue to do so today. Again, these externalizations should be of importance and interest to us. To ignore the potential contributions of the Far East in these many and varied fields is to promote provincialism; to study their culture in vital contexts is to find meaningful relationships and contacts between it and our own, and it is by comparisons and contrasts of this kind that really significant learning is promoted.

3. *The teacher should keep the avenues of communication between herself and the class open, particularly during the work-planning period.*

The job of deciding what shall be studied in reference to the Far East and what procedures shall be followed is not the prerogative of the teacher alone, but of the pupils as well. Pupils will work with greater interest upon a given unit or program of study if their thinking has been enlisted in its formulation. The work will be more down to earth, closer to the real lives of the group which undertakes the study. This does not imply abdication on the part of the teacher, but a larger role in guidance and total responsibility.

The study of Far Eastern units of study recently made seems to indicate that whenever children were really consulted about their interests in the Far East, their comments were *ad hominem*. Thus, for example, the objectives of third and fourth graders in a Detroit school were pointed as follows: To recognize the children's interest in and sympathy for the people of China by (1) considering the many things we have in common, (2) developing an understanding of and an appreciation for the customs and traditions of the Chinese people, (3) recognizing the many contributions the Chinese people have made to our civilization, and (4) arousing an even greater admiration

for the heroism shown by the Chinese people in their fight for liberty and democracy.<sup>3</sup>

Discussion between pupils and teacher should not, of course, be confined to the planning period, but should be continuous. The meaning and value of that which is studied, for the individual, the community, and the country at large, should ever be borne in mind.

4. *The teacher should study the Far East while in service, but should also avail herself of opportunities for professional study, especially during summer sessions.*

It is not possible quickly to develop Far Eastern specialists in the many schools of our country, nor is that necessarily desirable. The specialist is too often prone to organize a new course and thereafter defend it with his life. It would appear to be sounder procedure if each teacher would build up a background of understanding of the Far East through reading, through attendance of organized study classes which are offered by colleges and universities,<sup>4</sup> and through work in summer schools in which provision has been made for Far Eastern studies. Thus, the English teacher might concentrate upon the reading of novels, biography, and non-fiction which have come out of the Far East in recent years to the end that her advisory work on reading, material from this rich field be included. Teachers of the social studies, arts, and other fields, might in turn inform themselves about the contributions of the Far East to their fields of special interest. Thus, at least a reading acquaintance would be gained by teachers in service.

During the summer of 1943 a number of colleges and universities will be offering work on the Far East in the fields of history, language, education; some will provide learning experiences through such agencies as workshops. These opportunities for professional study should be utilized wherever possible since they will provide opportunity for discussion and interaction under professional direction which is, of course, not possible in individual study.

#### CURRICULUM CONSTRUCTION MATERIALS FOR THE FAR EAST

As the public school teacher comes to grips with the task of building a unit or program of study on the Far East, the need of functional material becomes a matter of first importance. How can such materials be located? Is the cost of desirable materials within the price range of a teacher who must, perhaps, pay for the purchase out of her own budget? With these practical considerations in mind, the following sources for materials are presented:

<sup>3</sup>*An Introductory Literature Unit on China for Grades Three and Four.* Detroit Public Schools, Detroit, Michigan.

<sup>4</sup>A survey of the status of and plans for Far Eastern education in teachers colleges of the country is now being prepared under the joint sponsorship of the American Association of Teachers Colleges and the U. S. Office of Education.

A study entitled *Studies on the Far East at Universities and Colleges in the United States* was recently completed by Alina M. Lindgren, Acting Chief, Division of Comparative Education, U. S. Office of Education. Copies may be secured by writing to the U. S. Office of Education, Washington, D. C.

### *Bibliographies*

The East and West Association, 40 East Forty-ninth Street, New York, N. Y., has prepared sets of annotated bibliographies on the following areas: India, China, the Near East, the Philippines. For each set there is one general or master bibliography which includes titles on history, geography, the daily life of the people, civilization, attitudes and viewpoints, and the current scene. These titles have been carefully selected on the basis of quality, usefulness, and availability.

In addition, there are for these areas seven shorter bibliographies slanted to meet the interests of each of the following groups: Armed forces, women's clubs, businessmen, high-school students, college students, labor unions, A Popular List.

Prices: General Bibliography, 20 cents; College Students, 15 cents; all others, 10 cents each. Available through The East and West Association, address as above.

*Bibliography of the Far East*, Arthur R. Hayes. Available through the American Council on Education, 744 Jackson Place, Washington, D. C., 1942. 55 pp. Price 35 cents.

Books, pamphlets, magazines, and visual aids are listed in this bibliography under the following countries: Australia and New Zealand, Burma and India, China and Southeast Asia, Japan and Island Possessions, Philippines, U. S. Islands in the Pacific, Russian Siberia. All book references are annotated.

*China—Books for Children and Young People*, Marion Horton. American Library Association, 520 North Michigan Avenue, Chicago, Ill. Reprinted from *Booklist*, March 1, 1942. 4 p. Price: 25 copies, 75 cents; 50, \$1.25; 100, \$2; 500, \$8.

Forty-five books and five films for children and young people are annotated in this bibliography by a librarian of the Los Angeles City Schools.

### *Units of Study*

Forty units and courses of study on the Far East which have been developed in public schools and by commercial publishers are listed and briefly annotated in the following publication: *The Far East—An Annotated List of Available Units, Courses of Study, and Other Curricular Material Dealing with the Far East*. All materials listed in the study may be secured at the price or on the conditions noted in the headings. This publication is available upon request from the U. S. Office of Education, Washington, D. C.

### *Loan Packets*

The packets listed below contain pamphlets, bulletins, periodicals, bibliographies, units of study, pictures, maps, and other teaching aids intended to further understanding of Far Eastern countries. They may be ob-



tained by writing to the Information Exchange, U. S. Office of Education, Federal Security Agency, Washington, D. C. There is no expense to the borrower since franked labels are furnished for their return without payment of postage, if wrapped in packages weighing less than four pounds.

China: Units of Study and Pictures .....	XXI-ES-1
China: Study and Teaching Materials .....	XXI-JSA-2 <sup>5</sup>
The Philippines .....	XXI-JSA-3
India .....	XXI-JSA-4
The Netherlands East Indies .....	XXI-JSA-5
Australia and New Zealand .....	XXI-JSA-6
Japan (in preparation) .....	XXI-JSA-7
Far Eastern Countries (General) .....	XXI-G-1

#### *Motion Pictures*

Fifty-five good films on Asia were annotated and listed in the November 25, 1942, issue of the Committee on Asiatic Studies, Bulletin V. A limited number of copies of this bulletin are available through the American Council on Education, 744 Jackson Place, Washington, D. C. Many of the films listed are available for rent through the Harmon Foundation, Inc., 140 Nassau Street, New York City.

A large and important job of curriculum construction<sup>6</sup> on the Far East needs to be done. Some of us will have to begin this educational task by first training ourselves; we shall have to learn through reading, through seeking out learning experiences by radio, through extension work, and through summer session work. And let those who have had a larger measure of experience with the Far East and therefore see its importance to the future of America with greater clarity redouble their efforts to help and advise those who stand in need of their assistance. The number of Americans who have had direct contact with the Far East and are now spread throughout this country is very considerable. You may locate some in your own community, and if you do you will find them glad to help you. That is not unusual, but usual among Far Easterners.

<sup>5</sup>JSA indicates suitability for junior and senior high-school and adult levels.

<sup>6</sup>Wilson, H. E., et al. "American Education and The Far East." *The Bulletin of the National Association of Secondary-School Principals*. Vol. 26, No. 104, February 1942, pp. 59-65. Helpful suggestions to the curriculum specialist as well as the classroom teacher.



## High-School Acceleration and Graduation in Wartime

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*This report, issued by the Maryland State Department of Education to all secondary schools in the state, is the result of a co-operative effort on the part of many members of the State Department of Education, including E. Clarke Fontaine, James E. Spitznas, and Wilbur Devilbiss, High-School Supervisors; and R. Floyd Cromwell, Supervisor of Educational and Vocational Guidance. The report is the result of conferences with superintendents of schools and principals of high schools.—Editor.*

### I. REASONS FOR ACCELERATION

HIGH SCHOOLS have already been called upon to modify their programs in various ways to meet war-time needs. Increased emphasis on mathematics and science, introduction of pre-induction and pre-flight aeronautics courses, further provision for guidance services, expanded programs in physical education—all these have brought problems to many schools in the way of schedules and personnel.

An added problem which is likely to confront the schools more and more in the coming months stems from the desire or need of some pupils to compress the high-school program into less than the usual four years. The armed forces not only induct young men of eighteen and over but are more and more in need of men trained in the fields of engineering, medicine, and other professions, and for entrance upon the study of these, high-school graduation is necessary. Consequently, the needs of the present war situation demand a reconsideration of the whole problem of acceleration.

It has been the custom to use various types of administrative adjustment in the high schools in an effort to adapt the program to individual abilities. The tendency in recent years has been to stress enrichment of material rather than acceleration, since the pupil's social, emotional, and physical development are regarded as of equal importance with his intellectual progress. In peacetime the best interests of the individual pupil largely determine the choice of adaptation. In wartime the national welfare becomes an urgent consideration, however, and possibly pupils who would better maintain a normal pace with an enriched program will be accelerated because of war needs.

In the near future most high schools are likely to confront the following situations: *First*, as programs are now organized, some pupils will be subject to the draft law before they are graduated; *Second*, some quarters will advocate

that selected pupils be permitted to enter college without being graduated from high school.

Anticipating the problems involved, the Maryland High-school Supervisors recently considered carefully the matter of acceleration and formulated and recommended certain policies in this connection. These the Maryland State Board of Education recently approved. They are as follows:

1. A program of acceleration but not abbreviation of the high-school course for certain selected groups of pupils who are likely to enter such professions as engineering, medicine, dentistry, nursing, and the armed services, where trained people are urgently needed. In the planning of such programs special adjustments should be made for those who are likely to finish college beyond the age of twenty.
2. A plan of acceleration but not abbreviation of the high-school course, the plan permitting selected groups of pupils to begin the accelerated program early in their high-school career and requiring a period of at least three years for completion of the high-school course.
3. A plan whereby any high school may make it possible for any youth becoming eighteen after the close of school in June, 1943, and prior to February 1, 1944, or in corresponding periods of subsequent years during the present war emergency, to pursue an accelerated but not abbreviated program of studies whereby he may be graduated at the end of a summer session if one is offered under approved conditions or at the end of the first semester of the school year 1943-44 or the corresponding semester in subsequent years of the present war emergency. Any accelerated program of studies shall be approved by the high-school supervisor and due consideration must be given to the advisability of permitting any particular pupil to pursue such a program.
4. The awarding of a high-school diploma in June to any senior who is inducted into the armed services between December, 1942, and the end of the school year in June, 1943, provided that
  - a. The pupil has considered all possibilities for deferment
  - b. The pupil has units for three full years of high school and that the caliber of the work he has been carrying in his senior year has been such as to indicate successful completion of the work required for graduation
  - c. Each case is considered on its individual merits, and after it has been presented in detail by the principal to the high-school supervisor and approved by him, request for the awarding of the diploma is made to the State Board by the county board of education.

It cannot be emphasized too strongly that any program of acceleration must be based on a thorough analysis of individual cases. No mass program of acceleration is advocated or under consideration. The customary high-school program should be designed in such a way that it is the best program for the average pupil. Unusual cases can be subject to acceleration, but no high school is expected to "step up" the program for all pupils or for particular groups of pupils unless they are analyzed as individuals. In a later section of this material will be found a list of acceleration procedures which will be found helpful in analyzing individual cases.

Furthermore, it must be realized that most of the pupils in the counties of Maryland are in eleven-grade systems. On the average, such pupils finish high school several months earlier than pupils who complete the typical

twelve-grade system. It would seem unwise to accelerate pupils who normally will finish high school at the age of sixteen—and there are many who do so at the present time. Even to accelerate some pupils who will finish at seventeen might be undesirable. In some of the smaller high schools probably no pupils will need acceleration. Even in the largest schools comparatively few will be included in the accelerated program. To repeat, each case must be decided on its individual merits and in the light of the guiding principles listed in this article.

## II. PUPILS NEEDING ACCELERATION

### *The Problem of Boys Facing Induction*

In order to get a clear picture of the extent to which acceleration is needed in any high school, it is important that the principal know exactly when each of the older boys will become eighteen. Accompanying this material will be found a blank which may be used to analyze the situation. Provision is made for five divisions; namely,

1. Boys already called directly from school and now in the armed forces
2. Boys who are now eighteen or will reach this age before the close of this school year
3. Boys who will become eighteen before school opens in the fall
4. Boys who will become eighteen during the first semester of next year
5. Boys who will become eighteen during the second semester of next year

For the convenience of principals there is attached a second blank which may be duplicated and used by a school to obtain the needed information quickly and uniformly without reference to the office records. A classification of the various types of cases follows, together with a discussion of suggestions and policies.

#### *1. Boys inducted into military service before the beginning of the second semester of 1942-43*

It is proposed that boys who were called for service before the beginning of the second semester and whose records meet certain conditions which will be described be given the opportunity to receive their diplomas upon the recommendation of the high-school principal and approval by the high-school supervisor. The same provision applies to boys who enlisted when their induction was imminent.

This is not intended as "blanket authority" to issue diplomas to all boys inducted. The pupil concerned must have completed three years of high-school work, must have been enrolled in school at least from September to December, and must have done work in the current year of such caliber that had he continued until June he would have been graduated. Each case is to be considered on its merit, and request for the award of the diploma must be submitted to the State Board by the county superintendent and the county board of education with the usual lists of prospective graduates in the spring.

The State Department is approving the awarding of diplomas in such instances, because the boys concerned would in all probability have been graduated except that their entrance into the service prevented their completing the full year. The provision applies particularly to boys inducted before February 1, 1943. The Department does not approve *in principle* this method of awarding diplomas; it wishes, however, to be fair to boys whose age was such that they could not stay to be graduated.

Principals should keep in touch with boys who have been inducted and should obtain from the military authorities a statement or certificate indicating completion of the regular period of induction training. This statement should be made a part of the pupil's permanent record and should be listed as his final semester of work on his record card.

2. *Boys called for induction during the second semester of 1942-43*

According to a ruling by Selective Service, boys who are called for induction during the second semester this year may be deferred *upon request to their local board*. The ruling applies not only to seniors but to all high-school boys. To be eligible for deferment (until the end of the school year) they must

- a. Have reached their eighteenth but not their twentieth birthday
- b. Be a *bona fide* high-school pupil
- c. Be in the last half of the school year
- d. Make **written request** for deferment stating that they satisfy the first three requirements.

Obviously, principals should keep in touch with all such boys and present to them the advisability of their making application for deferment *immediately* upon being ordered for induction. Some schools have prepared a regular form letter for the use of these pupils. Some schools have furnished the local board with a complete list of the boys who will become eighteen before June and will be eligible for deferment.

Some boys may feel hesitant about applying for deferment. It may be pointed out to them that the Selective Service has clearly made provision for such deferment and that the armed services have recognized the part the high school can play in preparing boys for the service through pre-induction courses as well as through emphasis on competency in mathematics, science, and English. It is therefore not unpatriotic to ask for deferment. Thorough and sound counseling is an imperative in this regard. The recently announced Navy Program for enlisting aviation cadets and then permitting them to be graduated should be clearly explained. (Very few other channels for enlistment still remain open.) A boy, who upon being called for induction fails to make application for deferment and thereby leaves when he could have completed his year, loses the educational advantages of the additional half year of high-school training which is permitted, and by implication, is recommended to him by the recent ruling of Selective Service.

If, however, a boy in the senior year decides, after careful thought and after all reasonable channels of counseling have been used, to enter the service

without waiting for the end of the school year, the State Department of Education will consider his request for a diploma, subject to the provisions outlined in the preceding section of this article. A diploma cannot be assured, because the State Board has not yet authorized such a step, but the matter will be given serious consideration.

Older boys who enter the service and are not in a position to qualify for a diploma may later be interested in obtaining an Equivalence Certificate by passing examinations administered by the State Department. This applies particularly to boys who are not in the senior class or who for some reason lack full senior standing. The examinations administered by the State Department for the *Certificate of High-School Equivalence* are offered twice a year in the various county seats. However, the Department is prepared to arrange for boys in the service to take the examinations at the posts where they are stationed. Furthermore, a bill which has been introduced into the State Legislature will lower for the duration and for boys in the armed forces only the permissive age for such examinations from the present nineteen years to seventeen.

### 3. *Boys becoming eligible for induction after the close of school in June, 1943*

It is for the pupils in the remaining three categories—those becoming eighteen during the summer, during the fall term, or during the last half of the next school year—that the school needs to consider at once the desirability of a program of acceleration. The complete record of such boys should be carefully scrutinized to ascertain the need for and the possibility and advisability of some form of adjustment or acceleration.

Boys who become eighteen during the summer vacation are likely to have been inducted before school re-opens in the fall. There is no certainty that boys who become eighteen during the fall term will be deferred until the end of the first semester; indeed, there is no assurance that boys who become eighteen during the second semester of next year will be deferred.

Nevertheless, for boys who are facing induction within the next year or so it is the obligation of the school to make all possible provisions by (a) adapting the high-school curriculum through the offering of pre-induction, and other courses, and (b) by planning a comprehensive and practicable program of acceleration to permit as many boys as possible to qualify for graduation, or to come as close as possible to graduation, before they are called for induction at the age of eighteen.

The State Board of Education has approved such an acceleration policy, and the state supervisors have prepared specific suggestions as to how such acceleration may be carried on. Many pupils can arrange their program of studies (in some cases including summer school) so as to be graduated within three or three and one-half years. This will mean looking ahead for a year or two in some instances, particularly in planning the schedule and program for next fall. Over-age pupils in the first and second years of high school

should have the opportunity to plan a program that will permit them to be graduated before being called for induction.

Of course, many over-age pupils will have become over-age because of difficulty with school work. In some cases added maturity brings an increased sense of responsibility, and the fact that they will soon face induction spurs them to greater effort. In other cases the *normal* high-school program seems almost out of the question—much less an accelerated one.

It must be repeated that every case should be individually considered. Theoretically, most high-school principals would agree with Dr. Will French that graduation and promotion for any given pupil should mean success *in tasks he can do*. Practically, however, many of our programs and standards are based on rather inflexible requirements, and we cannot change overnight no matter how much we might like to do so. Added to this is the increasing difficulty of obtaining and retaining really competent teachers who can make adaptations to current needs. However, the least a school can do is to give every boy a sympathetic hearing, the best possible program within the limit of its facilities, and every possible encouragement to complete the program.

There is a new deadline now—the age of eighteen. Every school must meet the challenge to the limit of its ability. Induction is an established fact; it is the task of the high school to make its maximum contribution to the boy who is facing experiences in the armed services.

*Acceleration of Pupils Who May Desire to Enter College Earlier Than the Date When They Would Normally be Graduated from High School*

There is a strong movement throughout the country, although not so pronounced in Maryland, for the colleges to admit high-school pupils prior to their graduation. Some influential education groups have suggested that recommended pupils be admitted to college at the completion of three or three and a half years of high-school work and, upon successful completion of a year of college work, receive both their college credits and their high-school diplomas. On the other hand, other groups have objected to this plan and at the present time opinion is sharply divided.

At a meeting of the National Council of Chief State School Officers in Washington recently the following resolution, among others, was approved:

That this Council express its conviction that all pupils should remain in high school until eighteen years of age or graduation in order that they may benefit fully from pre-induction training preparing them for such military, industrial, and other essential services they may be called upon to perform; in order that they may have the benefit of parental care and counsel as long as possible; and in order that they may be as socially and physically mature as possible before being exposed to the adult world in these most critical and disturbing times, and further

That this Council, individually and collectively, exert every effort to maintain for these pupils the rights and privileges of childhood, and further

That this Council, individually and collectively, pledge itself to bring about so far as possible the adjustments necessary to give the most appropriate training to these youth.

The National Association of Secondary-School Principals devoted a large portion of the January, 1943, issue of its *Bulletin* to a full discussion of the question and early in January mailed to principals and other school officials throughout the country the following resolution, which is to be found amplified and discussed on pages 109-111 of the January, 1943, issue of the *Bulletin*:

The National Association of Secondary-School Principals recommends that all students in the high school, or secondary school, not immediately subject to the provisions of the Selective Service Act, remain in the high school and complete, if possible, the full war-time program of studies offered by the high school and thereby qualify for graduation from the high school. It believes that the many war-time curriculum offerings of the high school provide for youth not yet eighteen years of age the best preparation and training for future services in the armed forces and for the production of essential war-time materials and foods.

Dr. Paul E. Elicker, Executive Secretary of the National Association of Secondary-School Principals, states regarding the college situation:

High-school principals for many years have been admonished by the colleges that students from the secondary schools should be better and more thoroughly prepared and that high-school students have a higher degree of maturity before they attempt to carry on the work of the first year of the college. Secondary-school administrators now have difficulty in understanding and accepting this new plan of the colleges that is in direct opposition to the long-established admission policy of higher institutions of learning.

The State Department of Education believes that two important principles should guide the consideration of whether a high-school pupil should attempt college work after spending less than four years in high school.

- a. The parents of the pupil concerned and the secondary school in which he is enrolled can better determine his mental and social readiness for college work after less than standard preparation than can the college which he may enter. The former know much more about the stage of his development than the college can ascertain through tests, interviews, examination of his high-school record, and similar data.
- b. If a pupil is to proceed to college after spending fewer than four years in secondary school, the three or three and a half years of his high-school education should consist of a planned, accelerated program rather than of a "chopped off" part of the regular four-year program.

Doubtless some few pupils, because of home background, reading interests, maturity, intellectual ability, age, and other factors, might without serious sacrifice enter college before completing the regular high-school program, but the Department holds that it would be better for the high-school authorities to plan as far in advance as possible the wisest programs for such pupils, in order that they may qualify for their high-school diplomas and be fully equipped to make the most of their college experience.



The suggestion that pupils should have a year or two at college before induction into military service seems to imply that the college training would constitute the best "final preparation" for pupils who are going into the armed forces. Perhaps, for some pupils. On the other hand, the adjustments now being made in the high-school program through the Victory Corps, the increased physical education program, the pre-flight aeronautics courses, the various pre-induction courses, and adapted guidance programs indicate that the high school is providing for pupils the best possible type of preparation for life in the armed services.

The State Department of Education will be glad to give advice and approval in connection with selected pupils who may complete their high-school work in a program of acceleration but not abbreviation. The Department is not in favor, however, of granting diplomas to pupils who voluntarily withdraw from high school prior to their graduation in order to enter college. It will be possible for such pupils later to obtain through examination *High School Equivalence Certificates* in lieu of diplomas secured through usual graduation procedures.

### III. ACCELERATION PROCEDURES

1. Schools should analyze carefully their pupil personnel and should make lists of boys classified by possible induction age.
2. Schools should see to it that pupils are informed concerning acceleration possibilities and that those who are interested have an opportunity to discuss the matter with the principal, counselor, or other designated staff member.
3. Some schools, particularly large ones, may wish to set up a faculty committee, or use an existing committee, to review all requests for acceleration. (The committee which in some schools considers work-experience programs might advise in cases of acceleration also.)
4. Requests for acceleration should be made in writing by the pupil and should be endorsed by the parent. If the principal approves, the request, with complete details, should then be forwarded to the county superintendent and to the state supervisor for final approval.
5. No pupil should be assigned a program of acceleration unless he desires to assume the obligations entailed.
6. All angles of acceleration in a particular case should be considered by the principal, the pupil, and the parent. Some pupils should be advised against such a program. Even a less able pupil, however, should be given the opportunity to attempt an accelerated program if he wishes strongly to do so. Pupils sometimes achieve surprising results when sufficiently challenged.
7. The following factors should be weighed in considering acceleration for any pupil:
  - a. Maturity—physical, mental, social



- b. Health
- c. Age
- d. Past performance
- e. Interests and ambitions
- f. Vocational intentions
- g. Financial status (with reference to college)
- h. Work habits
- i. Mental ability
- j. Teachers' estimates of pupil
- k. Parents' viewpoint and approval.

Not all these factors need be favorable before a pupil is approved for acceleration, but all of them may have some bearing on the situation.

8. It is suggested that pupils use a regular form in applying for an accelerated program. A copy of such a form will be found at the end of this article.
9. No pupil should participate at the same time in a work-experience program and a program of acceleration.
10. While acceleration is most worth considering for pupils who are now juniors, some pupils in the first or second year of high school could wisely begin an acceleration program in February, 1943, looking toward the possibility of being graduated in three or three and a half years.
11. While it may be impossible to accelerate and still "keep everything," a pupil should not be permitted to omit from his program things of particular value to him, regardless of whether or not he needs them for graduation. For instance, the physical education program should be maintained wherever possible, because of its importance for boys going into the service; pre-induction courses are likewise important; and pupils weak in English should not be given a type of outside program which this weakness would jeopardize.

#### IV. SUGGESTED POSSIBILITIES FOR FACILITATING ACCELERATION

Save in very unusual cases, it will be possible to carry on a program of acceleration and at the same time satisfy the usual requirements for high-school graduation. Two things make this possible. *First*, the prevalence of the hour period in Maryland schools means that pupils often spend in classes during a year more than the required amount of time. *Second*, most pupils have seventeen, or eighteen, or nineteen credits at graduation rather than merely the required sixteen. The average junior who has not failed any subjects is likely to have from thirteen to fifteen units at the end of his third year in high school. Some of the juniors will have all necessary units for graduation except English IV and perhaps one other subject. Even pupils who have failed in one or two subjects will have the eleven and one half or twelve units usually required for senior rating.

The following possibilities for completing unit requirements for graduation are suggested:

1. *"Doubling up" the school program this spring or next fall or both*

Possibilities along this line will be discussed in detail in the next section of this article.

2. *Summer schools*

Pupils may take courses in existing summer schools in near-by cities, or courses may well be set up in various centers. Perhaps two or more adjacent counties might combine facilities and personnel to set up a summer school.

3. *Additional outside work assigned*

Where pupils give evidence of being able to go ahead "on their own," additional outside work, either during the school year or during the summer, may be authorized. In mathematics, in history, in English literature, and other subjects, pupils can do reading, can work problems, can make reports, and can do other activities.

4. *Correspondence courses*

Some schools in other states have for several years been making use of recognized correspondence courses as an approved link in the regular high-school program. By this means, pupils can study "on their own" and at their own rate of speed. If such a procedure is approved, the pupil should be assigned to a particular teacher who will check his progress at regular intervals and assist him with any problems. Furthermore, his complete program should be carefully checked in order to avoid his enrolling for more work than he can be expected to carry satisfactorily.

V. SUGGESTIONS FOR ACCELERATION IN THE VARIOUS SUBJECT FIELDS

A. *English*

(Since this subject is required for graduation, it is listed first. Many of the suggestions are applicable to other fields.)

1. While continuing English III, pupils may take also the second semester of English IV, leaving the first semester of English IV until next fall.
2. In connection with English III, pupils may work out with the teacher additional projects to be counted as part of English IV.
3. English III and IV may be revamped (where there is more than one section) so that much of the literature, for example, can be read by the pupil outside of class and during the summer.
4. Half or all of English IV may be taken in summer school.
5. English may be offered seven periods a week during the present semester and five periods a week next fall, thus providing for three semesters' work in two semesters.
6. Classes may be organized so that pupils can take English two periods a day next fall, doing two semesters' work in one.
7. Where there are at least two senior sections, the above idea may be easily carried out thus: Assume the two sections are termed 4A and 4B. Arrange the year's work as Part I and Part II. Section 4A will take Part I first semester and Part II the second. Section 4B, on the contrary, will take Part II first semester and Part I

second. Pupils wishing acceleration will enroll in both 4A and 4B. Other pupils may enroll in either.

8. The same sort of thing is possible in schools having only one section of English III and one of English IV, if they combine groups into English III-IV and follow the procedure just described. Some schools combine these classes normally, having III-IV Academic and III-IV General, the program being offered in alternate years.

#### B. *Social Studies*

1. American history may be increased to seven periods a week the second semester and may emphasize modern problems. Problems of democracy may then be offered one semester next year, and one unit may be allowed for each subject.
2. Problems of democracy may be offered twice a day next fall for full credit in one semester.
3. See suggestions 1, 4, 6, and 7 under English.

#### C. *Science*

1. Substitute one pre-induction course for the second semester of chemistry or physics this spring. Offer one or more pre-induction courses for the science program next fall.

#### D. *Mathematics*

1. Offer trigonometry this spring along with Algebra II where feasible.
2. Offer review of mathematics or trigonometry as a semester course next fall.
3. In most instances, omit solid geometry from the program.

#### E. *Commercial Subjects*

1. Encourage pupils to do extra work in shorthand or typing outside of class and during the summer. If pupils have reached, by the middle of next year, the second-year standards set in the State bulletin, they may receive full credit upon recommendation of the teacher and principal.
2. The work may be doubled or taken in summer school as suggested for English.

#### F. *Foreign Language*

1. The work may be "doubled up" as suggested in sections 5 and 6 of English.
2. One semester's work may be taken in summer school.

#### APPLICATION FOR ACCELERATED PROGRAM

Date.....

Name ..... School .....

Date of birth..... Age..... Year of high school.....

Course (academic, general, etc.)..... Probable graduation date.....

Units of work earned prior to this year..... General quality of school work.....

Subjects, if any, failed in previous years.....

Grade, if any, repeated in elementary school..... Program being carried this year:

Subject	Grade	Subject	Grade	Subject	Grade
.....	.....	.....	.....	.....	.....
.....	.....	.....	.....	.....	.....

Occupational interest .....

Plan for acceleration: .....

..... Signed .....  
Parent Pupil

Approved \_\_\_\_\_

Superintendent \_\_\_\_\_ Principal \_\_\_\_\_

### CHART OF HIGH-SCHOOL BOYS FACING INDUCTION

School	County	Principal		
Boys already called directly from school and now in the armed forces	Boys who are now eighteen or will reach this age before the close of this school year	Boys who will become eighteen before school opens in the fall	Boys who will become eighteen during the first semester of next year	Boys who will become eighteen during the second semester of next year

**SUGGESTION:** Group pupils by their high-school year. List seniors first, skip a space and list juniors, and so on.

## War-Time Acceleration in Education\*

RAYMOND A. GREEN

*Principal, Newton High School, Newton, Massachusetts*

FROM THE HIGH-SCHOOL point of view we heartily approve the action of the Executive Committee of the National Association of Secondary-School Principals in recommending that pupils "remain in high school and complete, if possible, the full war-time program of studies offered by the high school, and thereby qualify for graduation from the high school."

We feel that there is little, if any, advantage to a pupil leaving high school to enter college before the completion of his course. The social, physical, and intellectual maturity of our "teen age" youth must be considered. The senior year in high school is the important year of his high-school career. Should the continuity of a boy's education in the high school be broken for a brief period in college prior to his entrance into the armed forces? Should not our youth take full advantage of the *free* public educational program?

We frankly feel that the high school will do a better job of teaching the high-school senior than the college. We understand the problems of that age. In reality, will a boy who omits or skips part of what once was necessary for admission to college receive pre-induction courses in college better adapted for the armed forces than those given him in the senior year in high school? The high-school curriculum is geared for war. The high school, even with its war program, still strikes a nice balance so that pupils are not completely "frozen" in their desires for some liberal education which men's colleges are forced to sacrifice to the gods of war and science.

Acceleration should not even be considered if the motive is the financial saving of the college. The college will have to draw in its economic belt around its educational middle!

Some acceleration in high school is proper for our very able and mature students through additional courses during the regular year or through courses offered by the high school during the summer. The war-time program of the modern high school includes courses in electricity, radio repair and maintenance, welding, machine work, patternmaking, first aid, drafting, aeronautics and meteorology, food and clothing conservation, nutrition, and others with increased emphasis on physics, chemistry, biology, mathematics, geography, English, French, Spanish, history, and physical education. This program, geared to war and victory, is our answer to youth remaining in high school until graduation or entrance into the armed forces.

\*A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

Following is a description of the war-time acceleration program of one high school undoubtedly repeated in high schools all over the country. This section was written by Miss Cora E. Riley, Secretary of the War-time Committee on Education and Chairman of the Newton High School Guidance Department.

#### THE NEWTON HIGH SCHOOL GOES TO WAR

The Newton High School has adjusted its curriculum to meet emergency war-time needs and possible post-war adjustments. The story concerns, for the most part, a co-operative venture between the Newton High School and the Newton Trade School making combined use of their opportunities.

At the present time two-thirds of all men inducted into the army are assigned to duties requiring specialized training. Also, women are being employed in increasing numbers in industrial concerns to fill positions held by men who have gone to war. These two factors have created a great demand for pupils with short periods of intensive vocational training.

This situation in a school that in ordinary times prepares more than half of its graduates for higher institutions of learning demanded a radical change in the high-school curriculum and in the community's conception of education. As a preliminary step Julius E. Warren, Superintendent of Schools, appointed a committee consisting of representatives of the Newton High School and the Trade School to study possible opportunities for Newton boys and girls to have training which would develop knowledges and skills having direct bearing on the present emergency. The chairman of this committee was Raymond A. Green, principal of the high school. He stated the problem by quoting from an address by General Somervell:

The job of the schools in this total war is to educate the nation's manpower for the war and for the peace that follows. We can lose this total war on the battlefield as a direct result of losing it on the educational front. Education is the backbone of the army. . . .

Our army is an army of specialists. Out of every hundred men inducted into the service sixty-three are assigned to duties requiring specialized training. We aren't getting those sixty-three specialists through induction centers, but modern warfare dictates that we must have them.

After several committee meetings an agreement was reached on three possible plans of High School-Trade School Pre-Induction Vocational Training. The outline of these plans was then submitted to a group of citizens representative of the civic organizations, local industries, and the army and navy. Suggestions were obtained from this group and then the three plans were discussed in the high school in two class assemblies,—one for the juniors and one for the seniors. Pupils were given descriptive outlines of the new courses in order that their parents might be informed of the opportunities.

Next, an evening meeting was held for parents when the plans were explained in detail. Pupils then enrolled for the course of their choice.

#### PLAN I

This is a sixteen-weeks course for senior boys and girls started in January, 1943, and offering intensive training in either welding or machine work. A group of senior boys elected welding and machine courses in September. They completed their shop work in January and then returned to the high school for four months of academic work. At the end of their course these pupils took tests and were successful in meeting the required standards at the Boston Navy Yard, Lawley's Shipyard, and the Hingham Shipbuilding Yard. Seventy per cent of these boys worked as welders in shipyards before completing the course.

#### PLAN II

This plan is arranged on an alternate co-operative basis with the trade school. Boys attend the high school and trade school on alternate weeks. Thirty-six boys elected this course and were divided into two divisions ("A" and "B") of eighteen boys each. Group "A" attends the trade school while Group "B" studies subjects related to the practical work in the trade school—mathematics and science, and also academic courses in English and history. After a week, Group "B" enters the trade school shops and Group "A" has the academic program. Pupils completing the courses under



Pupils of the Newton, Massachusetts, High School are enthusiastic about the Pre-Flight Aeronautics course.

either Plan I or Plan II will receive both the high-school diploma and the trade-school certificate.

#### PLAN III

This plan consists of additional courses of a technical nature that may be taken either during school time or in the afternoon. These courses are offered to boys and girls in the junior and senior classes.

Fifty boys are studying pre-flight aeronautics. This course was started in the Newton High School Summer School and the enthusiastic letters that we received from boys who entered the aviation branches of the services convinced us that it was a valuable pre-induction course. For example, one boy wrote from the Army Air School at Nashville, Tennessee:

The mental exam was a swell one. Boy, if you ever want a recommendation for the course I took with you or for the movies that the school department so kindly purchased, I will be glad to give it to them. It made me a pilot instead of a bombardier. Most fellows who didn't know a lot of the stuff that I learned in this course were made bombardiers. I finished more of the questions than any of the fellows and I also knew more of them.

Boys interested in pre-flight aeronautics were given thorough physical examinations before being admitted to the July and September courses. The examining group consisted of doctors from the City of Newton Health Department assisted by the Public Health nurses of this department, members of the high-school physical education department, and the high-school nurse. This examination was planned to meet all the basic navy medical entrance requirements as listed in the *Manual of the Medical Department*, Section XXIII. The results were as follows:

Total number of boys examined .....	67
Passed with no conditions .....	32
Passed pending minor corrections .....	28
(Overweight, underweight, teeth, acne, tonsils)	
Did not meet physical qualifications but allowed to take course because of desire to have training in the hope of eventual opportunity in some branch of aviation service. (Included boys wearing glasses) .....	6
Rejected (a former osteomyelitis case) .....	1

These boys as a group were in excellent physical condition. They presented, however, an over-all physical picture typical of adolescence. Their height range was  $63\frac{1}{2}$  to 75 inches; weight range 109-230 pounds; pulse 60-100; and respiration 16-24.

The work of this course attracted the attention of a naval officer of the Boston Naval Aviation Cadet Selection Board. He has been responsible for completing arrangements for the enlistment of the group as Naval Aviation Cadets upon their graduation in June. They will join as a unit to continue their training and go into the service together. To our knowledge, this is the first school in the country to be represented by its own unit in the air arm of the navy. The instructor of this class is greatly impressed



with the seriousness of purpose of each member. To quote: "These boys realize that aviation is to be the dominant factor in the war and in the peace to follow and they are determined to get into it and become experts, realizing that as aviation develops they will develop with it." The pre-flight aeronautics course has also been given this year in the Newton Evening School for young men not enrolled in the regular day schools of the community.

Six boys are taking a Pre-Chef course. The work is planned as pre-induction to the army and navy. These boys hope to enter this line of work when they enter the service. A former high-school graduate who is now an enthusiastic rookie in an army cooks' school keeps the group informed by letter as to methods of procedure. All available articles and advertising appearing in current magazines about the feeding of the army tend to stimulate interest.

The business department is lending its support to the training program by offering a course for boys in the use of office machines. This particular course was added to the program at the suggestion of a naval officer who attended one of the early meetings held by the committee. He deplored the lack of boys who were trained to do "paper" work and as the WAVES are being trained for shore duty there will be a continued need for boys to have this training. About a hundred boys and girls were given opportunity to have instruction in the use of the typewriter.

In addition to the classes held during school time there are groups of pupils taking courses in the late afternoon. The shops are busy during the usual school day (eight-thirty to three o'clock), but many of the boys and girls in the college preparatory courses lay aside their books, change their "school clothes" to slacks and overalls and take their places at four o'clock in the workshops of the Trade School for two hours on Monday, Tuesday, and Wednesday of each week. These pupils are studying drafting, radio repair and maintenance, electricity, auto mechanics, printing, patternmaking, and welding. These courses are also available to former high-school graduates and to the public. All pre-induction courses given in the trade school are taught by instructors who have spent years at their respective trades and have been certificated by the Massachusetts Department of Education.

#### OUTLINES OF PRE-INDUCTION COURSES

##### *Patternmaking*

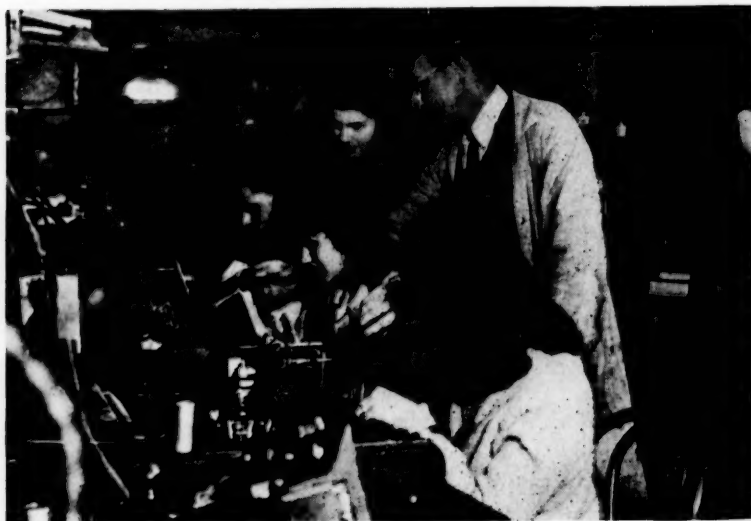
Metal castings are produced by pouring metal into sand molds. Before this is done it is first necessary to construct a form or model of wood and of such construction that it may be easily withdrawn from the sand mold. The model so constructed is known as a "pattern." The tradesman who constructs wood patterns is a "patternmaker."

It may be said that no other metal trade affords a greater opportunity for the development of constructive ability than patternmaking. While a wood patternmaker works in wood, the conditions that govern the construction of patterns in their accuracy and other requirements leave little in common between this artisan and those of other woodworking crafts. The tools used in patternmaking do not differ from those used by other woodworkers except in the case of special tools that the particular needs of the trade have developed.

The patternmaking course includes an introduction to foundry practice, patternmaking terms, kinds of patterns, types of coreboxes, methods of construction, use and care of hand tools, pattern layouts, use and care of power tools, pattern allowances, fillets, pattern finishing, and wood turning. It is desirable that pupils taking patternmaking should have had mechanical drawing.

#### *Machine Drafting*

The term "machine drafting" means drawing as used in the industrial world by machine engineers and designers. It is the graphical language used to express and record the ideas and information necessary for the building of machines. With it the draftsman may describe minutely every operation necessary in the building of a machine and keep a complete record of the work for duplication and repairs.



Girls, as well as boys, acquaint themselves with the functions of each part of a radio set in the Newton, Massachusetts, High School Radio Shop.

As a foundation upon which all machine designing is based, drafting becomes the most important single branch of study in a trade school, with the possible exception of mathematics. Today there is a great demand in industry for men and women with a basic training in machine drawing. To help meet this demand the Newton Trade School is giving a basic course of approximately one hundred and eighty hours to high-school juniors and seniors who are interested and can give the time. A general outline of the course follows.

1. Machine Operation (Electric)—Use of various types of machines
2. Use of Instruments—Practice in the use of drafting instruments and scales commonly used
3. Alphabet of Lines—Types of lines and their use in machine drafting and application by drawing
4. Orthographic Projection—The principles of projection as used in the drafting room
5. Applied Geometry—A series of geometric problems commonly used by the draftsman in machine construction
6. Sketching and Detailing—Drawing of simple machine parts to familiarize pupils with terms and notations used in drafting
7. Sections and Conventions—Principles of the various types of sectioning and conventional method of showing materials
8. Standards for bolts, screws, and keys—Practice in the layout of various types used in the machine industry
9. Auxiliary Projection—Practice in layout of auxiliary views from machine details
10. Tracing—Both pencil and ink tracing on paper and tracing cloth
11. Blue- and Black-Line Printing—Actual practice in making prints for use in the shop.

### *Welding*

Pupils taking this course receive training in both oxy-acetylene and electric-arc welding. Welding has replaced, to a great extent, all other methods of fastening. It is quicker and more efficient than riveting or other means of fastening structural members together. Welding calls for good eyesight, muscular co-ordination, and great skill in fusing metals. An outline of the course as given pre-induction pupils follows.

1. Machine Operation (Electric)—Use of various types of machines
2. Method of Welding
3. Gas Welding
4. Safety Measures
5. Polarity
6. Types of Rods
7. Types of Welded Joints
8. Weld Inspection—Visual and Machine
9. Types of Beads
10. Electrode Position of Fillet Welds
11. Electrode Position of Butt Welds
12. Difference of Position—Fillet and butts
13. Contraction and Expansion of Metals
14. Faults and Remedies in Butt Welding

15. Root and Intermediate Beads
16. Navy Yard Test (U. S. Navy)
17. Lloyds Test (British)
18. Welding Signs and Symbols
19. Review

### *Electrical*

The purpose of this course is to teach the essentials of electricity. Ohms Law, how to figure wire sizes, types of circuits, and the practical applications of these and other electrical facts are taught. The student learns to splice and solder various sizes of wire. Cleat work is taught from which he learns about circuits and switching. Low tension wiring is installed giving the student practice in the wiring of bells and buttons with annunciators and a few simple telephone circuits.

Some construction work with conduit and B.X. is given. Elementary A. C. and D. C. motor circuits with their proper controls are handled as the student advances in skill. The student learns how to handle tools including their use and care, and should be able to wire up simple circuits, get a motor going, and approach any average electrical repair job with a knowledge of the fundamentals of electricity.

### *Radio Repair and Maintenance*

The object of this course is to acquaint the student with the functions of each part of a radio set, and the effect of the failure of any part contained therein. A study of radio symbols and schematic diagrams is essential so that the pupil may understand the construction of a radio. The fundamental theories of electrical circuits such as the following are the primary essentials: current distribution in series and parallel circuits; voltage drops across parts of a circuit and resistance calculation; effect of a magnetic field around a wire through which current is flowing, when the wire is wound in form of a coil; the inductive effect when A.C. current flows through the coil, and when two coils are placed near each other, or on the same form; effect of a condenser across a coil. The use of various types of tubes and their construction as well as the same study for condensers, resistors, and coils is an integral part of the course.

The laboratory exercises give the student opportunity to use test equipment of the following nature: tube testers, condenser and resistor testers, signal generators, and the cathode ray oscillograph. In shop practice the student learns the use of tools, proper methods of soldering, coil winding, and assembling at first a one-tube set. Then other stages are added, until a modern superheterodyne receiver is finally constructed. The above jobs and studies require the use of test equipment, to test for the proper operating voltages, aligning up of condensers, and the continuity of the circuits.

### *Auto Mechanics*

The armed forces of the nation depend so much on our ability to keep

mechanized equipment rolling that a study of the fundamentals of auto mechanics is very desirable for the young man entering this branch of the service.

This course is intended to give girls practical experience in the operation and maintenance of the motor vehicle so that they may take the places of our boys, either in local garages or in the Army Motor Transportation Corps (Civilian). An outline of the subjects taught under this course follows.

1. Motor Terminology
2. Principles of the Internal Combustion Engine
3. Engine Lubrication Systems
4. Differential Action and Adjustments
5. Transmissions and Shifting Systems
6. Cooling Systems
7. Steering Systems
8. Hydraulic and Power Brakes
9. Tire Repairing
10. Front Wheel Alignment
11. Ignition Systems
12. Fuel Systems
13. Carburetors
14. Starting Systems
15. Generators
16. Voltage Regulation
17. Valve Refacing and Grinding
18. Engine Tune-Up
19. Batteries
20. Drilling and Tapping
21. Automatic Choke Systems
22. Preventive Maintenance, Lubrication, etc.

### *Physical Education*

The physical education department has planned a new physical training program to prepare boys to take their places in the armed forces or in war industry. An obstacle conditioning course of the army *Commando* type has been erected on the athletic field. This equipment was built in the Newton Trade School. Its object is to toughen boys for the grim work that lies ahead. The new obstacle course covers a distance of seventy-five yards. It starts with a ten-yard run to a three-foot hurdle, continuing with another ten-yard straightaway to a seven-foot scaling wall. Next comes the "spider crawl" and five yards beyond, at the top of an incline, is a "monkey swing" that consists of iron pipes, on which the boys are required to swing from pipe to pipe, 10 feet above the ground. A "balance beam" and three four-foot fence vaults, five yards apart, complete the obstacles. The course ends with an eleven-yard run. The exercises in the physical education classes are being made tougher gradually by the addition of body-building exercises recommended by the army.

The indoor program in boys' physical education is being gradually stepped up in accordance with the suggestions of army and navy officials. Its aim is to make boys physically fit to carry their responsibilities as members of the armed forces and as efficient workers in the war effort. The program consists of conditioning calisthenics, response drills, ranger activities, apparatus work, tumbling, and recreational activities.

An additional program is being carried on for senior boys and junior boys seventeen years of age or over who cannot swim. Once a week these boys meet at the Newton "Y" tank for instruction. The aim is to have every boy graduating from high school able to "swim to keep afloat."

#### *Pre-Chef Course*

The outline used is taken from the booklet, *Baking for Uncle Sam*. The boys are trained in baking bread, cake, pie, and simple pastries. The topics stressed are: sanitary precautions observed by commissary personnel, the preservation of food materials, the classes and groups into which foods are divided, the functions of each type of food as a part of the diet, and vitamins and their source in various foodstuffs.

#### THE ACADEMIC CURRICULUM

All teachers were agreed that the regular academic curriculum of the high school should be revitalized to develop in the youth of our city those knowledges and skills that make for national understanding, strength, and unity. The content of many of the courses lends itself to the present crisis. The following examples illustrate course revisions to serve present-day needs.

#### *Science*

All the science courses in the high school have been changed to include and to emphasize many topics that will enable boys and girls to render more intelligent and effective service on the battlefield and the home front. A group of senior Academic V boys and senior business boys have had a special course in the physics of aeronautics in which the interest has been unusually keen. The physics work with the boys in Plan II Co-operative High School-Trade School course specializes in the radio and automobile. The college preparatory and general academic physics course has stressed aeronautics, guns and projectiles, detection of submarines and airplanes, special instruments, search lights, signal systems, uses of radio, and weather conditions and predictions.

In chemistry emphasis has been placed on a study of explosives, bombs, flares, war materials, fire extinguishing gasoline and other fuels, purification of water, and the properties and uses of various metals and alloys. The biology courses include such subjects as health, personal hygiene, foods, prevention of contagion, disinfectants, inoculations, care of wounds, and war gases. The outline for the commercial geography classes now covers meteorology, pres-

ent day sources of raw materials and foods, exports and imports, and natural resources of our own country and other countries.

### *Home Economics*

The home economics department has endeavored to strengthen the home front by adjusting all of its courses to aid in the war effort and to prepare students for the definite home and community responsibilities that lie ahead. In the foods classes every effort is being made to acquaint the pupils with the national and local food situation, to make them alert to home marketing conditions, rationing laws, and low-cost meal preparation.

The standard National Red Cross nutrition course is used in the nutrition classes. Girls completing this work will be awarded the Red Cross certificate for junior nutrition workers. They will be eligible to work in hospital diet kitchens and in community projects under the supervision of an adult chairman. After training in the child study classes, girls are not only prepared for better home life but are well qualified to act as assistants during emergencies in children's shelters or for groups of children of war-working mothers.

In the clothing classes greater emphasis is being placed on the renovation, salvage, and care of clothing. There is close co-operation with the local Red Cross chapter. To date, 100 garments, 110 khaki utility bags, and 50 canteen aprons have been made. The textiles classes are studying government war regulations for the manufacture, purchase, and use of fabrics. Students are taught the essentials of good buying.

### *Mathematics*

High-school boys are interested today in courses that make them more useful in war. Elementary or advanced mathematics is recommended as basic training for most branches of the service. It is for this reason that the Newton High School is offering several courses in mathematics in addition to the regular college preparatory classes.

A class in elementary trigonometry is given for junior and senior boys in the general academic course. A course in aviation mathematics is given for boys who are not in the regular mathematics courses but are taking pre-flight aeronautics course.

A class in related mathematics has been organized for boys and girls in the Plan II Co-operative High School-Trade School group. Frequent conferences are held with trade instructors and the work is planned to give training in the material needed in the shops. Throughout the year the slide rule is taught and re-taught. This is of great importance to the boys entering aviation branches of the service. Most of the mathematics classes in the high school have been taught to compute the Victory Tax and the interest on United States bonds.



*French*

The French department finds itself today in one of the most interesting, challenging, and vitalizing periods of its existence. One of the functions of language is the expression of man's needs. New needs create new words. A new and interesting vocabulary is bursting upon our air-minded, radio-minded, military-minded, and world-minded young Americans.

Regular classroom work is supplemented with increased emphasis upon oral French directed toward the needs of today and tomorrow. It is supplying its more advanced groups with an up-to-the-minute vocabulary which includes such topics as the radio, movie, modern travel by air, land, and sea. The pupils use this vocabulary in daily classroom conversation directed and stimulated by the teacher.

Heretofore, the program was concerned with the geography of the motherland, France itself. Today it is being expanded to include colonial France as well, especially North Africa and wherever American forces are stationed on French territory. So the study of geography has suddenly grown from France and its neighbors to the empire of France and its neighbors. The work is done in French so that the pupils learn not only the geography of Africa but they learn to pronounce correctly the names of countries, cities, and persons outstanding in the news of today.

More and more the cultural and utilitarian aspects of French is being recognized as a part of the program. Without sacrificing the former, every effort is made to develop the latter. On the war front, American men and women need French to make themselves understood in non-English speaking communities. On the home front pupils are preparing to meet better such emergencies if and when they face them. As a means to this end they create imaginary situations in Tunis, Bizerte, and Dakar. They wish to ask their way, they need a doctor, food, tobacco, stamps, and the like. They ask questions and they receive answers. They condition themselves for a possible tomorrow. Their interest in all phases of their study of French increases as their power in oral self-expression expands. To some students the utilitarian aspect of French makes the only appeal. To others it is but the gateway to the broad field of culture.

## DEPARTMENT OF PLACEMENT

The director of placement reports that due to war conditions the field of work for youth has suddenly expanded to offer greater opportunities at an earlier age than in normal times. This is true for girls and boys both in and out of school.

The office conducted a survey to determine the extent of gainful employment of all high-school pupils. It revealed that sixty per cent of the seniors, fifty-eight per cent of the juniors, and fifty per cent of the sophomores work from two to thirty-five hours per week in addition to their school program. The average time worked a week is thirteen hours;

the average wage is thirty-three cents an hour. The holiday demand for workers in the post office and in greater Boston stores gave employment to hundreds of Newton High School pupils. An eligibility ruling was established and 175 academically eligible pupils were excused from school from one to ten days for gainful employment.

#### CLUBS

The school has about thirty clubs. All of these have been geared to the war effort. The Home Economics Club has 104 members in a Red Cross Canteen course. The Mathematics Club is studying navigation. The Aviation Club has eighty members. The Social Studies Club has as its project, "Understanding the War and Its Causes."

There has been a great deal of talk since Pearl Harbor about the relation of education to the war effort. Teen-age boys and girls have a big job to do before they can settle down to a normal way of life. All our youth are encountering new problems and facing new situations; careers are being interrupted, emotional disturbances and economic strain are frequent among young people who face disrupted family and home life.

The secondary school has a big responsibility in helping its young people train themselves for the task that lies ahead of them. And the Newton experiment is just that,—namely, an attempt to offer a constructive program of training to prepare the high-school boy and girl to meet emergency war-time needs.



A special course in Red Cross Canteen Service provides well-trained workers for emergency needs.

## War-Time Acceleration in Education—In the Junior College\*

JOHN W. HARBESON

*Principal, Pasadena Junior College, Pasadena, California*

ANY APPRECIABLE acceleration at the junior college level must be effected through co-operation with the adjacent units—high school or university or both. The two traditional years of the junior college constitute too restricted a span to make possible any considerable amount of acceleration in themselves. There are, however, several plans of acceleration in operation which include junior college and the adjacent units. It will be the purpose of this paper to describe them briefly and inquire concisely into their respective merits.

### ACCELERATION THROUGH CO-OPERATION OF HIGH SCHOOL AND JUNIOR COLLEGE

One type of co-operation between the high school and junior college is accomplished through the continuous year around programs. This compels a closer articulation between the programs of the two institutions and provides more frequent and easier transfer from the lower to the higher unit. In a great emergency such as the present, in which time is of the essence, such a plan has virtually one hundred per cent approval. Many junior colleges as well as universities are operating on a three-semester basis of sixteen weeks each. An increasingly large number of high schools are accomplishing the same results through the two traditional semesters and summer sessions of from ten to twelve weeks in duration. This plan offers a convenient opportunity for acceleration with little or no necessity for curriculum revision.

Another plan of co-operation between high school and junior college, and one about which there is much honest difference of opinion, is the admission of students to the junior college before the actual completion of the traditional four-year high-school course of study. This is in essence the plan proposed by the Educational Policies Commission on the supposition that a student who is to be drafted into military service at the age of eighteen could profit more from the first year of college than the last year of high school before his departure. A number of junior colleges and higher institutions have put this plan into effect although, in general, it has not met with the approval of the high school. The Policy Commission's recommendation has set off a heated controversy between the two educational levels in which the welfare of the individual student has too often been forgotten in an anxiety over the welfare of institutions.

\*A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

Dr. Walter C. Eells, Executive Secretary of the American Association of Junior Colleges, summarizes the situation in the following succinct statement: "It seems to me it (The Commission's recommendation) has distinct elements of danger and should be accepted only with full realization of these, and also with a knowledge of the limitations imposed by the EPC in making the recommendation. Some of these restrictions have not been stressed in the publicity given the plan. For example, they state: (*italics those of the author*)

"We urge that, during the war emergency, *selected* students who have achieved senior standing in high school and who will, in the *judgment of high-school and college authorities, profit* from a year's college education before they reach selective service age, be admitted to college," etc. . . .

"It is worth noting that the recent national conference of State Superintendents of Public Instruction passed resolutions condemning the proposal. A strong editorial against it is to be found in the current (January) issue of the *Nation's Schools*. The same issue contains an adverse statement 'If Colleges Start Cradle Snatching' by E. R. Van Vleck, Assistant Commissioner of Education of New York, who states that the 'recommendation is unsound, unnecessary, and unrealistic.'

"Junior college administrators, interested in their enrollments, will doubtless be tempted to accept the recommendation, with or without its restrictions. Primarily, however, the welfare of the young man, not that of the college, ought to be the determining factor. I strongly recommend, therefore, that before you attempt to put the recommendation into effect, you study the references mentioned above, particularly that of Dean Edmonson, and have them fully discussed by your faculty and perhaps trustees or school boards as well."<sup>1</sup>

Late developments with respect to the Commission's recommendations are set forth, in part, in another statement by Doctor Eells.<sup>2</sup>

. . . "The Northwest Association of Secondary and Higher Schools has recommended that the practice of admitting high-school juniors to college be restricted to the upper five per cent of the high-school class. Some Minnesota colleges want to limit it to the upper fifteen per cent. Other colleges and universities are showing a tendency toward a far more extensive administrative interpretation. One college announces it will take from the upper twenty-five per cent, another from the upper thirty-three per cent, etc."

It is probable that there will be considerable experimentation in the plan recommended by The Educational Policies Commission, all of which should be welcomed and receive a careful and scientific evaluation. It is equally probable, however, that high schools will not acquiesce in the elimination of their twelfth-grade programs without considerable opposition.

The problem of acceleration in high school and college was studied by a sub-committee of the California Committee for the Study of Education under

<sup>1</sup>War-time Letter No. 14, January 9, 1943, Page 3. American Association of Junior Colleges.

<sup>2</sup>War-time Letter No. 15, February 10, 1943, Page 5. American Association of Junior Colleges.

the chairmanship of Dr. Merton E. Hill, Director of Admissions at the University of California. The sub-committee made three general recommendations which were subsequently approved by the general committee:<sup>5</sup>

"I.a. It is recommended for the emergency that students who meet the minimum standards of graduation from high school, as set up by the Rules and Regulations of the State Board of Education, and who have fulfilled with recommending grades (B average) the entrance requirements for a bachelor's degree course in a California university, college or junior college, be issued a diploma of graduation and be eligible for admission to that institution. It is understood that such students must obtain the recommendation of their high-school principals.

"I.b. It is recommended for the emergency that students other than those who are candidates for admission to degree courses in college, who meet the minimum standards for graduation as set up in the rules and regulations of the State Board of Education, may be issued a diploma of graduation, provided their acceleration meets an imperative need for their services in the war effort, and provided that after consideration by the high-school principal, it is evident that opportunities are available that are not present in the high school.

"II. It is recommended that for the emergency approval be given to the acceptance of college work when such college work is taken during the senior year of high school concurrently with high-school work. It is recommended that in order that this provision may apply to students below eighteen years of age, appropriate legislation be passed.

"III. It is recommended for the emergency that opportunity should be given to capable students in the ninth to the eleventh grades to take additional work in order to complete satisfactorily the normal high-school course in less than four years."

The conservative character of the committee's report is indicated by the following quotation also taken from the official report.<sup>6</sup>

"There was no wish to recommend radical changes in the graduation requirements as set up by local boards of education or to suggest long-range changes in education. The recommendations are for the duration of the emergency only. It was recognized that students who might take advantage of the privilege offered them, should be young people of suitable maturity and intellectual capacity."

As may be observed from the quotations, recommendations Number I and III accomplish little in acceleration beyond hastening the student upon his way. Recommendation Number II, however, does point the way to some definite and genuine acceleration through co-operation between high school and college. Commenting on this recommendation the report says: "The

<sup>5</sup>Quoted from the *Report of the California Committee for the Study of Education on Acceleration of Students for the Emergency*. Issued from the office of Dr. Merton E. Hill, University of California at Los Angeles, under date of January 22, 1943. Pages 2 and 3.

<sup>6</sup>Quoted from the *Report of the California Committee for the Study of Education on Acceleration of Students for the Emergency*. Issued from the office of Dr. Merton E. Hill, University of California at Los Angeles, under date of January 22, 1943. Page 1.

practice of permitting students, who have completed the greater part of their high-school work, to carry senior courses and freshman courses in college at the same time should be legitimized. This is a useful means of acceleration.<sup>55</sup>

In the year 1932 the Pasadena Junior College, which is a four-year unit embracing grades eleven to fourteen, inclusive, organized as a single institution, inaugurated this experiment on a five-year basis under the auspices of the University of California. At the conclusion of the five-year period the experiment was accepted as a success and the plan is now in operation on a permanent basis. Stated in a sentence the plan authorized twelfth-grade students, who are in the process of completing all the unit and subject requirements for high-school graduation and have room in their program for additional courses to select such courses from college rather than high-school offerings before actual high-school graduation,—such additional credits to be accepted for advanced standing on transfer to a higher institution. In consequence of this opportunity seventy-five per cent of those completing the twelfth grade in Pasadena Junior College have to their credit some college units which are universally acceptable for advanced standing in higher institutions. The amount has ranged from two to twenty-nine units. This plan makes possible a considerable amount of genuine acceleration accomplished at no expense to the high-school program and at no extra tax upon the energy and vitality of the student.

In the course of the Pasadena experiment the question was raised many times as to whether twelfth-grade students were sufficiently mature to carry college courses with success. Fortunately ample evidence on this point is at hand. The studies of Dr. Herbert Popenoe of Menlo Junior College,<sup>6</sup> Dr. William H. Proctor of Stanford University,<sup>7</sup> Dr. E. S. Jones of the University of Buffalo,<sup>8</sup> and Dr. Robert Hardin of the University of Nebraska<sup>9</sup> are typical of many that might be cited which have established by scientific measurement the ability of the twelfth-grade student to do college work successfully. Moreover, in actual practice, twelfth-grade students in Joliet Township High School, in Stephens College, and in the experimental high schools at Chicago and Minnesota have over a period of years been enrolled in college classes and achieved success. Cornell College admits superior students after three years of high-school work, and in Kansas City, Missouri, and throughout the South, students are admitted into standard colleges and universities after eleven years in the public schools.

<sup>55</sup>*Ibid.* Page 3.

<sup>6</sup>See report on *The 6-4-4 Plan of School Organization in Pasadena, California*, by W. H. Proctor, pages, 150-55, published by the Pasadena Board of Education, 1933.

<sup>7</sup>*Ibid.* Part III.

<sup>8</sup>E. S. Jones, *Studies in Articulation of High School and College*, University of Buffalo Studies, Vol. IX, 1934.

<sup>9</sup>Robert Hardin, *A Study of the Maturity of High-School Seniors, Junior College, and University Students*. Unpublished—Reported at University of Minnesota Conference on Research Problems in Higher Education, September, 1935.

ACCELERATION THROUGH CO-OPERATION BETWEEN JUNIOR COLLEGE AND  
HIGHER INSTITUTIONS

Some genuine acceleration can also be accomplished through co-operation between junior college and university. The age-long criticism of the liberal arts college is that it has been extended over too long a period of time and as a consequence has graduated its students at too advanced an age. Educational literature is replete with examples of this criticism only a few of which will be reproduced in this connection.

President James H. Baker, Chairman of the Committee of the National Council of Education on the Economy of Time in Education, writing in 1913:<sup>10</sup>

"... The period of general education is too long; economy in the selection of subjects and topics and in methods will save approximately two years in the whole period of general education; with greater efficiency in the earlier periods the college course may well end nominally at twenty instead of twenty-two; a redefinition of culture may modify the preparatory period; the ideals of our civilization today may affect the view of culture and the desirable limit of formal training."

Munroe Smith, Managing Editor of the *Columbia University Quarterly*, quoting opinions of the faculties on shortening the college course, issue of March, 1903:<sup>11</sup>

"With very few exceptions the professors of Columbia University are of the opinion that a combined secondary, collegiate, and professional education, as the secondary schools, the colleges, and the professional schools are now organized, is too long and unduly delays the graduation of the professional student. With few exceptions, they are also of the opinion that time may best be saved—i.e., may be saved with the least sacrifice of the educational results that are most to be desired—by requiring something less than four years of college study as a preparation for study in the professional schools."

Similar quotations can also be found in great numbers in modern educational literature and are too well known to require reproduction in this paper.

Two major efforts have been made in the history of the liberal arts college to eliminate this criticism. The first and original effort was by a group who proposed to eliminate waste by a shortening of the time with little or no change in requirements and the second and more recent attempt has been through a general curriculum reorganization to terminate the college course two years earlier than in the past. It is apparent that the first group were attempting an impossible solution. Most of them were unwilling to shorten the

<sup>10</sup>U. S. Bureau of Education Bulletin, No. 38, 1913. *Report of the Committee of the National Council of Education on Economy of Time in Education*, James H. Baker, Chairman, Page 9.

<sup>11</sup>Munroe Smith, Managing Editor, *Columbia University Quarterly*, Vol. V, No. 2, March, 1903, Page 139.



curriculum and were attempting to do four years work in three. Naturally, their faculties were skeptical and refused to follow. Moreover, they were attempting to solve the problem by working on the college exclusively whereas they should also have taken into consideration the secondary school as well. Any effective reorganization of general education must cover the whole field of general education. It must include the high school as well as the lower division of the college. It may be possible to reorganize and save time over an eight-year span—it is hardly to be expected within the comparatively short program of the liberal arts college alone. This is particularly true when we consider that the college consists of two heterogeneous and unrelated halves.

The proposal to solve the problem through curriculum reorganization, however, is full of tremendous possibilities. It has long been recognized that the standard liberal arts college is not a homogeneous institution. The first half is plain general education and partakes of the characteristics of the secondary school. The second half involves specialization, research, and professional study and is a logical part of the university proper. Recognizing this position a large number of standard colleges and universities have divided the college into a "lower division" and "upper division," with a hard and fast boundary line separating the two. It is not uncommon to find a diploma, a certificate or an "associates" degree given at the end of the sophomore college year.

Inasmuch as the first two years of the liberal arts college are secondary in character and carry to completion the program of general education started in the high school they logically belong in connection with the upper years of the high school rather than with the upper division of the standard college. The application of this principle to school organization leads to the organization of a new four-year American college embracing the upper two years of the traditional high school and the first two years of the traditional college. Under this form of reorganization, therefore, we should have a four-year high or preparatory school embracing grades seven to ten, inclusive, and a new four-year liberal arts college embracing grades eleven to fourteen, inclusive, organized and administered as single institutions. A reorganization of the curriculum over this eight-year span would make possible the completion of the program of general education at the end of the fourteenth year and the incidental saving of two years of time on the part of the college student. It should be pointed out that this is not merely an idealistic dream; it is a practical, working plan now in operation in thirty-four junior college and public school systems and in at least one major university. Certainly no more effective program of acceleration has thus far been devised at the college level.

Inasmuch as this new type American college carries the student in his program of general education to a point from which he may profitably transfer to the university proper to pursue his program of specialization, research, or

professional study as the case may be, the question logically arises "should not the A.B. degree be conferred at this point?" The University of Chicago has answered this question in the affirmative and in so doing it has demonstrated the courage of its convictions. It is the logical outcome of its philosophy from William Rainey Harper down to the present time. On numerous occasions, Dr. Hutchins has announced this as a forthcoming development. The idea has also been championed by Nicholas Murray Butler, James M. Wood, Ray Lyman Wilbur, and other leaders in the field of higher education. No one should have been shocked or offended by the announcement of the new policy. The time is now ripe for the junior colleges and other institutions giving freshman and sophomore college work also to bring their practice into conformity with sound educational theory.

In spite of these facts, however, no educational announcement in recent years has created such a furor in the circles of higher education as has this long-expected action of the University of Chicago. It has been assailed by certain college presidents and learned societies who asserted that "the bachelor's degree has come to stand for the successful completion of four years of collegiate education beyond the secondary school." A widely circulated statement insisted that "it is desirable that there be reasonable uniformity in the award of these degrees."<sup>12</sup>

According to the Chicago philosophy, on the other hand, the A.B. degree should stand for accomplishment rather than the passing of so many years of time at a higher institution. President Hutchins has frequently stated concretely of what that accomplishment should consist. He has stated that the A.B. degree should signify the completion of the program of general education, and the university is demonstrating that this goal can be accomplished in fourteen years of schooling.

Moreover, the statement that, "It is desirable that there be reasonable uniformity in the award of these degrees," rests upon the fallacious assumption that the A.B. degree always has and does now stand for the same thing in the history of American collegiate education. But compare the attainments of four years of college in colonial days with those of the present. Says Dr. Leonard V. Koos: "The median age of entering freshmen at Harvard University during the period 1829-32 was a little over sixteen years. Considerable proportions of students were fourteen and fifteen years old at entrance; that is they were not far from the age which many youth now enter the four-year high school. . . . By 1880 the median age of entrance at Harvard had advanced to about eighteen and one-half years—an increase of fully two years. . . . The advance in age at entrance was accompanied by a corresponding increase in the requirements of admission."<sup>13</sup> From these and other facts regarding

<sup>12</sup>Quotations in this paragraph are from a statement emanating from the office of the Executive Secretary of the Association of American Colleges.

<sup>13</sup>Leonard V. Koos, "The Bachelor's Degree to College Sophomores," *The School Review*, September, 1942. Page 495.

the curriculum, which the limitations of space preclude discussing in this connection, we may conclude that historically about the only point of similarity from time to time has been the four-year span. It is also true that the liberal arts college course has been built from the beginning on diversified lengths of the secondary period. Many of the old high schools and academies were three-year institutions, and even in the present day colleges have been known to accept high-school students on the completion of the eleventh grade rather than the twelfth. The fact is that the A. B. degree never has in the past and does not today mean the same thing from time to time or from institution to institution. President Hutchins was not the originator of "confusion" when he announced the granting of the A.B. degree at the end of the junior college period.

Dr. Leonard V. Koos in his typical analytical manner considers the argument both for and against the conferring of the A.B. degree at the end of the junior college period and by comparison arrives at well-founded conclusions.

"CONSIDERATIONS PRO. Although numerous arguments have been mustered in support of the proposal, three seem to stand out as of greatest significance. (1) One of these is that granted the Bachelor's degree to students at the end of the sophomore year is the logical culmination of long-time trends in American education. (2) The second relates to more strictly sociological considerations involving the family and industry. (3) The third is the facilitation of the proper organization of professional and other advanced specialization (including graduate work) that would be afforded by general acceptance of the proposal."<sup>11</sup>

"CONSIDERATIONS CON. . . . These seem to be also mainly three in number.

(1) One of these concerns the confusion that will be engendered by such an action. (2) A second consideration put forward is that the action endangers the position of the small independent college. (3) The third centers in the contention that few, if any, colleges have developed programs that would justify such action."<sup>12</sup>

"COMPARISON OF THE CONSIDERATIONS. One comes away from comparison of these considerations pro and con with the conviction that the cons either are not very acceptable or are much less fundamental than the pros. The cons are static rather than dynamic and are obstructive rather than being tied in with commendable trends. They are also detached from one another and are not vitally interrelated. Those having some plausibility are arguments from temporary expedience and do not take the long-time view. By contrast the pros reflect basic and long-time forces or influences that are significantly interdependent and, from some standpoints, all of a piece. These influences will ultimately prevail—have already accomplished most of the

<sup>11</sup>*Ibid.*, Page 495.

<sup>12</sup>*Ibid.*, Page 500.

change. It largely remains to refine the changes with more awareness of their significance and then to signalize them by attaching appropriate labels, like the degrees. To undertake to deny these forces or influences is to be a King Canute commanding the tides to recede."<sup>10</sup>

This new American College will perform all the legitimate functions of a college program. It will, with a proper organization of the curriculum over the four-year span embracing the upper grades of the high school and the first two years of the traditional college, lay a sound and adequate foundation in general education. This general education will aim at satisfying the universal needs of man in the major areas of human activity.

No one claims for a moment that this new American College will *complete* the program of general education. No true educator would claim this even for the traditional standard college. In a true sense general education cannot be completed in a college of any type. General education is a life-long process, extending from birth to death and in a sense is never completed. All that can be expected of the college, and it is the belief of the writer that this can be accomplished in the new American College, is to carry the student to a point where he is prepared to pursue his special field or professional study within the university. He might profitably go on in the study of general education for the rest of his life, but there comes a time in the life of every individual, when, solely in the interest of expediency, in order to begin his vocational career at a reasonable age and become an economically self-supporting member of society, it is necessary to shift the emphasis from general to vocational or professional education.

In conclusion, therefore, it may be said that the junior college can cooperate with adjacent units in an effective program of student acceleration. It should utilize the entire calendar year to speed up the progress of the student. It should not hesitate to admit twelfth-grade students to college classes when such a course would best serve the interests of the student. It should reorganize the educational program by a close articulation with the upper high-school years and complete the program of general education by the end of the fourteenth grade thus saving two full years at the college level. The necessities inherent in the present national emergency make this a strategic and logical time for the inauguration of some long-needed reforms in collegiate education.

<sup>10</sup>*Ibid.* Page 503.

## Guidance for Essential Occupations and the Armed Forces\*

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READERS HAVE, no doubt, been exposed to many theories of guidance. The institutions they represent, whether of secondary-school or college level, will furnish examples of many activities labeled guidance which may not reveal an immediate connection with the problems usually involved in placement. In fact, it is often difficult to dis-associate "guidance" from teaching procedures which most good modern schools have used for a long time under other names.

Without any slight intended to the many excellent activities related to a guidance program and valuable in themselves in the total effort of the school, the writer is assuming that since the pre-occupation of both schools and colleges in time of war is supplying manpower for the military and civilian services of the nation, the placement functions of a guidance program have immediate importance. Just as the citizen who is rationed in his coffee supply finds it fruitless to try to justify plenty of coffee either as a necessity or a luxury, so when war demands reach young people at an age when their services are required in the national economy, it is of little use to discuss certain elements of education which we may be called upon to sacrifice. The problem is only to retain all that we can as long as we can of the desirable elements of the curriculum, while we perforce turn our attention to demands which cannot be dodged. Among these demands are certainly those for manpower.

The justification for invading the province of the school with man-power necessities is based both on law and necessity. The particular law of greatest moment, of course, is that which makes all male eighteen-year-olds subject to immediate military service if they are physically qualified. The necessity can be argued from the figures advanced by authorities in their description of man-power needs in total warfare. Sixty-five million persons will be required, they tell us, for military or civilian services in the coming year. This means that one out of every two persons in our population must be at work or at war. If a family of six is of such a nature that only one person in it can either work or fight, then in some other family this deficiency of manpower must be balanced, for out of every six persons in the United States three must work or fight. The situation is so serious that no able-bodied young person finishing secondary school and approaching at the same time legal working age, may be excused into a life of idleness or of aimless "education."

\*This address was printed in *School and College Placement*, Volume 3, No. 3, March, 1943. Pages 11-15. This is a copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

Man-power authorities, who are demanding that millions of women not usually employed enter the labor market, can by no means neglect the 2,000,000 youth who leave school either by dropping out or by graduation each year. Of these 2,000,000, about 1,200,000 in ordinary times are graduated from secondary schools. Another 800,000 leave before high-school graduation. The demand is not that all of these high-school graduates go to work, if they do not enter the army. A very considerable number of them must be set aside for training at levels beyond the high school. Higher skills must be developed even though the time of entering into the man-power pool may be thereby delayed.

If, then, the schools and colleges must be regarded in war as to a large extent man-power pools, some means should be devised so that the energies of all these youth may be directed as economically as possible into the places in military and civilian war service where they can best serve. It is at this point that the vocational guidance program in wartime can render services which no other function of the school can supply.

#### THREE FUNCTIONS OF THE GUIDANCE PROGRAM

There are briefly three ways in which a guidance program geared to war-time needs must aid the schools. The first of these is making an inventory of abilities, aptitudes, and achievements—in fact, supplying a picture of the assets and liabilities which each boy and girl possesses as a prospective man-power unit. The second of these is a comprehensive cataloging of the critical needs and services into which these young people should be encouraged to go each according to his own ability, and, within limits of national necessity, each according to his choice. The third of these is the provision of a means whereby an individual boy or girl may match his personal attributes with some need of a kind which he can fill better than some other kind. This third provision, of course, demands individual counseling of the youth in a conference with a person skilled to help him make his decision. When these three functions are operating, the school itself must in effect guarantee to the young person that when his decision has been made to secure training for a particular service or to enter the military or civilian force as an active participant, he will be given every assistance through a modified curriculum to prepare himself during the rest of his time in school to be a better and more efficient worker or fighter.

#### INVENTORY OF STUDENTS' ABILITIES

Let us consider briefly each of these points separately. In any school the inventory should begin with those students who are within six months of the point at which they are likely to leave school, whether by graduation or drop-out. When these have been inventoried, the rest of the enrollment should be recorded in the order of their probable approach to participation

as useful manpower. If a school already has good records for all its individuals, some summary of the relevant information should be made so that the availability of pupils for the man-power effort may become clear. In general, a war counseling record for an individual would include such items as his ability to do school work; the fields in which he has had major specialization; his hobbies and interests insofar as they show some significant achievement, and especially leadership; his work experience; his physical condition, and any scores on standardized tests which the school has or can secure.

The record should be in such form that the war-time counselor may answer with some certainty the pupils' inquiries as to whether he is able to undertake training or offer his services in some category of critical war needs. An example would be the case of the boy who wishes to be an army pilot. The school record should show physical characteristics which conform to the qualifications specifically set forth for army pilots. The record should also show his previous achievements in mathematical and scientific studies. It should show as well his rank in his class, both on a numerical basis and in terms of some standardized scholastic aptitude tests. The fact is that the qualifications required for a pilot of a war plane are so rigid that the school owes it to the boy to point out to him that a single irremediable characteristic would prevent him absolutely from qualifying. Two obvious reasons for this are that the boy should not be encouraged in an ambition which he cannot realize, and at the same time prevented from undertaking some other kind of training equally in demand, for which he could qualify. To a different degree this examination of personal qualifications is essential whether the youth thinks he or she can serve as a farmer, nurse, typist, riveter, physician, or sales person, or work in a volunteer or paid part-time job while in school. In war, either training or placing the inept is aiding the enemy.

#### CATALOGING OF CRITICAL NEEDS AND SERVICES

The provision of information about critical needs and services is not so simple a task as it may seem. In general, the school will find itself faced with two *strata* of occupations: the first will consist of professional and military demands; the second, of sub-professional and non-military demands.

In the first group of occupations it will be found that practically all information must be sought from Federal or national sources, or at least from non-local sources. The number of nurses the country needs, or of engineers, doctors, or school teachers, is a figure to be compiled by an examination of the national picture, since professional people are usually not trained locally or employed locally except by coincidence. It is likewise obvious that only the military authorities can tell either in actual figures or in ratios how many WAACS, or aviators, or technicians, or navy officers of particular background, are desired. For these reasons schools must make provisions through city



or state clearing-house procedures or through direct contact with national authorities to keep a constant flow of the everchanging information coming into the school counselor's office. Under emergency conditions, the announcement of yesterday is canceled by the order of tomorrow, and the school must be responsible for informing its youth of such changes. Today, for instance, a WAAC must be twenty-one years old, although Congress may in the near future say she need be only eighteen. Yesterday only the navy allowed seventeen-year-olds to volunteer; today both army and navy are welcoming such boys.

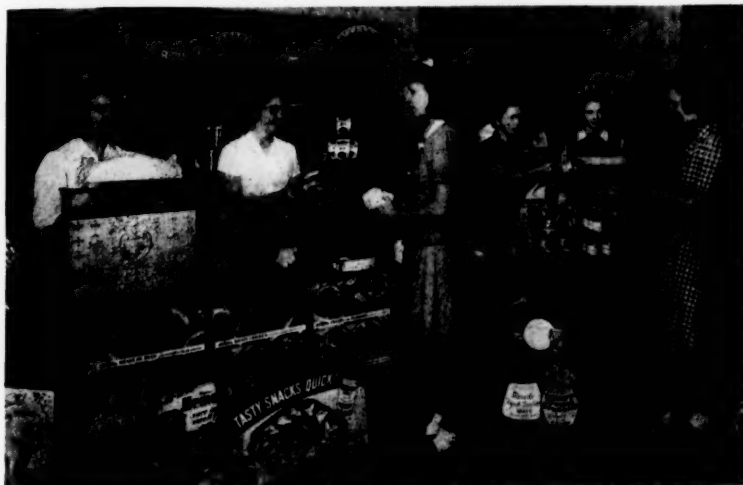
In the second group of occupations, non-military and non-professional needs will be found on analysis to be local for most eighteen-year-olds. The school will, therefore, require local sources of information such as the U. S. Employment Service or, if for some reason this Service cannot reach all elements in the community, contacts with employers themselves. In rural communities the touch must be kept with farmers. In cities such essential services as selling and distributing may have to be increasingly filled with youth not subject to war service. Girls will even more than usual be called upon to fill these positions and those in offices. In war, supplying this information does not mean merely telling in an occupational pamphlet what the duties of a sales person are. It should mean, for instance, discovering that a certain store will require ten sales persons by a certain date; securing, if possible, ten young people who will be through school and able to undertake such duties by that time; and making some effort in the meantime to prepare them, through co-operative efforts, to be efficient sales persons when they take the jobs.

#### NECESSITY FOR INDIVIDUAL COUNSELING

Space need not be taken here to discuss the many means of presenting information about critical needs and services to the pupils of the school. The information should be presented to groups until all young people involved have a general background, and to individuals by counselors as each youth comes to the particular job of making his own choice.

Decisions as critical as young people must make in these wartimes certainly call for all the assistance which can reasonably be rendered. Every school, therefore, should choose the most able person it has available to serve part or full time as a war-time counselor, provide him with whatever additional in-service training can be found, give him space where counseling can be done in privacy, and supply him with both time and materials to carry on his duties. It is not expected that specialists can be brought into faculties for this purpose.

It should be expected that a person undertaking such a function will make himself familiar to the best degree of which he is capable with the processes of gathering and interpreting the individual records, with the



The Palmer High School's, Palmerton, Pennsylvania, guidance program includes a co-operative arrangement with local businessmen.

occupational information in all areas, and with the techniques of interviewing and counseling. As time goes on such an individual will become not only expert in the duties just described, but will also become a source of information to the principal and the entire faculty as to facts essential in adapting the curriculum and the administrative procedures of the school to the task of supplying military and civilian manpower to the local community and to the nation as a whole.

Many of the most critical questions of young people will be about going to college. Many problems in this area are still unsolved. At this writing no final decisions have been arrived at concerning many details which will affect boys who will be inducted into the armed services at eighteen years of age and who ordinarily would be competent to enter higher institutions of learning. Moreover boys who are graduated before they are eighteen will be puzzled as to whether they should enter college for a brief period, go into industry, or, if they are seventeen and physically fit, enlist. The choices for girls are equally puzzling. The only thing clear to both boys and girls is that their time must be devoted either to preparation or participation.

Regardless of final decisions affecting these problems, the obligation of the school to provide a war-time guidance program is just as binding. The young person should be supplied with as clear-cut a picture of his abilities and aptitudes as modern practice can yield. He should know the current

military and civilian needs for his services, and what opportunities he may have for supplying them. He should have available to him in the school someone skilled, versatile, and worthy of his confidence to counsel him in his emergency. There seems to be an imperative involved for every school, large or small, urban or rural, according to its ability, to provide these necessary war-time counseling services.

#### POST-WAR GUIDANCE PROBLEM

It is fashionable in some places to say that post-war problems can wait, and that all we should discuss now is winning the war. It seems more logical to point out the danger of having peace burst upon us just as war did on December 7, 1941. If peace should explode in our faces, the problem of adjustment brought on by the immediate, or even gradual, demobilization of 20,000,000 persons involved in military or civilian war services would be staggering. Many of these demobilized would be young people who had worked at no job except the trade of war, others would be persons either young or old, whose total training and experience had been in one-skill jobs in plants which might be abandoned entirely or radically changed in equipment. The retail and distributive fields and small business in general, now curtailed or even closed by war priorities, would expand.

Is it not obvious that one of the first provisions necessary in this whole process of readjustment would be services of almost exactly the same nature as those of the guidance program outlined above? The problem would be with adults, but there would be the same demands for an assessment of individual abilities, a survey and exploitation of occupational opportunities, and a counseling process. Involved would be immense programs of rehabilitation, retraining and placement, complicated by substantial migration. The problem will be one for every community, since people discharged from the armed forces or out of civilian employment would have a natural tendency to go home, which is usually the place they lived before they were caught up by the emergency. Can any better foundation be laid for this post-war condition than the training in the schools now of persons skilled in a war-time guidance program? Whether or not these same individuals would be most helpful in dealing with adults, they and the schools of which they are a part would provide a nucleus from which local community adult adjustment services might develop into all their necessary ramifications.

In the operation of war counseling services of the scope under discussion there is need for co-operation among Federal, state, and local authorities. Many agencies on all these levels have a share to contribute to the total effort, and their story is too long to be a part of this article. Meanwhile, the adoption rather universally of the simple program suggested seems not beyond the power of any institution. In war, "difficult things are done right away; impossible things take a little longer."

## War-Time Education for Girls\*

DALE ZELLER

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THE EDUCATION of girls for the duration cannot be considered entirely apart from the education of all youth during the war, neither can it be considered entirely apart from the education of girls before and after the war. But the work opportunities that have come to women during this crisis involve adolescent girls in the modified program of living for women. Headlines and quotations from recent news reports and articles indicate the confusion that exists in the minds of the public in regard to the role youth is to play now and in the post-war world. A few picked at random illustrate the point.

*Teen-Agers Run War Plants on Small but Effective Scale*, reads the headline on a front page cosmopolitan paper on February 19, 1943. The article states that 1500 executives of Junior Achievement Companies from all over the United States had gathered in Chicago, that many manufactured and sold war goods. It reports that in many cases girl friends have taken over the garage, basement, and attic factories and are running them for the duration. Another newspaper article urges that one main effort of public schools should be to make youth physically fit by supervising clothing, exercises, diet, and habits, that we should teach "chores instead of cheers," that we cannot pursue our wasteful, inefficient, and pleasure seeking living, and be free from attack without or revolution within.

*High Schools Must Go to Work to Solve Man-Power Problem*; under that heading appears the statement that "Girls should be trained in agriculture, auto repair, blue-print reading, bookkeeping, cooking, foundry, the International Morse code, machine shop, mechanical drawing, model plane building, nursing, nutrition, office-machine operation, personal hygiene, photography, plane repair, pre-flight aeronautics, radio and telephone repair, shorthand, typewriting, and woodworking." The article concludes by saying that in an average peace-time year less than one half of the nation's high-school girls seek employment after they finish school, but that now and after the duration, every girl must work at some essential job as a patriotic duty.

The Federal government lowers the minimum age for women working on Federal contracts from eighteen to sixteen years. Another proposal is that both high-school girls and boys work half time and go to school half time.

Mrs. Roosevelt in writing on *The World We Want* says, "Lastly, I think, I want a world where women are conscious of the great contribution which

\*A copy of the address that the author had prepared to give at the annual convention of the National Association of Secondary-School Principals at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

they can make to world problems, where they willingly accept their responsibilities and gladly co-operate with men on an equal basis in the many fields where they must work together to achieve the best results. Women, because they bring children into the world and are the principal influence during the early years, always have had great power in every nation in indirect ways. Today that power extends itself into direct action which deepens their responsibility and makes it more important than ever that they should equip themselves as well as possible for the role which they must play in the world. It is a role of limitless opportunity which we must approach with courage because of the great obligations which accompany it."

#### DIVERSITY OF THOUGHT ON YOUTH PROBLEMS

These few statements show that people are thinking in a mixed-up way about youth and its place during and following the war. In the same breath the public urges youth to engage in useful tasks, passes laws to let youth take jobs before they finish school, and asserts that a different post-war world depends upon the kind of education given children and youth in school now. This attitude on the part of the public that did not find jobs for youth in a depression period makes us question the public's point of view in regard to youth. Is the public saying, "When there are no jobs for youth, we must keep them in school. We will entertain them and occupy their time there until they can find jobs?" Is it assuming that the job is the thing and when they are needed to work or fight, education is not important? Either point of view is exploitive, and neither seriously considers the part education of youth can play in making the kind of world we with our resources might have. Have girls been kept in high school either because there were no jobs for the under-privileged ones or no early marriage opportunities for those who did not need to work?

If there is confusion about the boy, there's double confusion about the adolescent girl. At least the course for all boys is relatively clear in our civilization; for every boy, rich or poor, is expected to be a wage earner. Society is not so clear about the role it wishes the woman to play. For sometime now the girl has been made insecure by not knowing whether she would be a dependent wife and mother, a wage earner and a wife and mother, or an unmarried wage earner. If she chose to be a wife and mother, society often interfered by failing to provide remunerative jobs for men so that she could marry. If she married she often was forced to help make a living. If once she had been proficient often she had lost skill and status as a worker by her life as a housewife, and then was forced to become again a wage earner. If she had never acquired ability to be self-supporting, she began as a novice. If a girl prepared herself to be independent economically, she often had to give up all ideas of marriage as many employers would not employ married women—teaching school is not an

exception. If she had a profession or a job that would countenance marriage, she often had to choose between her job and having children, since society had not frankly faced the question of a woman's place in a modern world and had not yet accepted the dual role that woman must play as mother and wage earner. This failure to meet frankly and solve intelligently the question of the role women must play in a modern world that could improve the quality of human living by utilizing its abundant resources to that end, increases the confusion about the role of girls in wartime and the kind of school education needed for them.

#### EDUCATION MUST NOT BE CURTAILED

One thing emerges clearly in the thinking of those who believe that much that happens in the post-war world depends on the kind of education we give youth now. Youth must not be exploited. The last thing we must give up is adequate education for children and youth now; if these difficult post-war problems are to be solved by the democratic process of discussion and decision. If the education of boys is to be curtailed by the necessity to fight, then the education of girls must be made all the more socially significant. For those who hold the obsolete point of view that education exists to further the get-along of the individual measured by successful competition for money, popularity, and prestige, there is only one answer, schools are not financed at public expense merely to improve Lucy Jones' social status or to help Tom Smith make more money because he has developed shrewdness and cleverness in competition by going to school. All-out effort in school for the duration means that children and youth must help in the tasks the nation needs to have done, but they must be protected in the process. Their participation now must not frustrate their major contributions as adults in a post-war world. Our first concern must be what is happening to Susie and Mae and Doris while they are doing war tasks. Their education cannot be considered apart from this.

Secondary schools exist to help adolescents do their growing-up tasks. Some of their needs and tasks are well understood and defined. Whatever is demanded in the war effort that helps the girl do her developmental task more effectively is to be sized and utilized with gratitude for the opportunity.

#### YOUTH SHOULD STUDY EMERGING EVENTS AND TRENDS

Schools that have already modernized their curriculum to meet the basic needs of adolescence are in a better position to utilize war opportunities than are those that have continued a traditional pattern. Foremost among the assets of modernized schools is an adequate program of pupil guidance. These guidance facilities can be utilized to the fullest extent in helping adolescents assume their war-time responsibilities.

The basic education for both boys and girls now is understanding of and insight into the problems that are overwhelming the world now. Every

day they should under guidance, study emerging events and trends. This is vital, foremost, and fundamental. There is nothing new in this suggestion, for the last decade has seen forward-looking programs sensitize adolescents to problems of large group living. Many are urging that youth at eighteen be given the vote saying that if they are old enough to fight for their country, they are old enough to vote. Even if they do not vote at eighteen, in a short three years they do become voters and if understanding of present-day problems in a democracy has not constituted a large part of their secondary-school education, many will never have steady and consistent guidance about the problems they will be expected to have opinions and convictions about as voters. For at least one period or more a day during high-school years the adolescent should be discussing and studying problems of taxation, labor unions, wages and hours of working, farm prices and production, social security, unemployment, inflation, and party government. These problems are controversial and should be approached from that basis. The adolescent should learn what the problem is and what needs to be done to improve the quality of human relationships in this area. If possible he should participate in doing something about it. For girls, in addition, there should be guided education about the changing world for women, its problems, its possibilities, its responsibilities, and its demands.

#### EFFECTS OF THE WAR

The war has interfered seriously with the adolescent's adjustment through work and play to the opposite sex in one's age group. This is a major growing-up task of adolescence. As a result some serious and undesirable things have happened that might have been prevented by more thoughtful direction. One of these is the high-school adolescent marriage. In one mid-western state many members of the senior high-school classes are married. Early marriages may solve some biological problems, but they decrease the prospects for happy companionship in our modern world. The impermanence of 'teen-age marriages as shown by divorce records furnishes convincing evidence of this. In other instances, moral delinquency has increased at an alarming rate among adolescent girls. 'Teen-age marriages and moral delinquency dramatize the need for adequate recreational education, for the study of homemaking and marriage, and the effect of the war upon home relationships. Much delinquency can be prevented by proper provision for boy and girl companionship under war conditions. The school must lead the agencies of the community to unite in setting up conditions favorable to morality and morale. This need for association with boys must be provided under legitimate and safe conditions, or girls today living in freedom, unprotected, and undisciplined seek and find male association under conditions that negate the values the school has tried to inculcate. One of the tasks of adolescence is to develop a suitable scale of moral values. Legitimate sex conduct is on this



scale. If it is not done in adolescence, the probabilities are that it will never be done.

#### YOUTH NEEDS WORK EXPERIENCE

Girls as well as boys need legitimate work experience, but we do not need a war in a highly mechanized world to teach us that work under conditions that merely furnish a job by which one makes a living regardless of what happens in the process is undesirable. Many jobs open to adolescent girls overtax their energy. This is unwise and undesirable in times of war or peace. Three criteria need to be applied in selecting jobs that adolescent girls take on for pay: (1) the work must not interfere with health or needed rest, (2) the worker must be paid adult wages for adult skills and accomplishment, and (3) the work should be assigned and guided by the school. These suggestions will be discussed in order.

Jobs undertaken by the adolescent must not interfere with health or rest. Where child labor laws have existed and been maintained adolescents are usually protected. But each adolescent worker becomes a special case. The adolescent needs frequent rest and change; too many jobs overtire by monotony and long hours. Too often the adolescent girl loses sleep and comes to school inert and listless. Leisure for rest and study are requisite for a real education. Willful waste and misuse of adolescent energy is of grave concern to the nation at large. One adolescent girl just out of school reports working sixteen hours a day for seven days a week in a defense factory. In a few months she quit exhausted. Until the adults of the nation have exhausted their physical resources in the service of their country, the adolescents' energies should not be drained. However, work for pay makes important contributions to the adolescent who plays an adult role in the working world, for she assumes responsibility and acquires status. If those guiding her education will put emphasis on the learning and the service rendered rather than on the money earned, the gain of status proves a valuable asset to her; for the attaining of status is one of her growing-up tasks. A girl's own earnings offer splendid opportunities for guidance in money management, budgeting, buying bonds, and contributing to war agencies and needs. Adult wages without guidance in spending adds to the wasteful and profligate spending of the average war worker. This undirected experience with money tends to hinder a girl's growth in learning to manage money, to enrich human living and helps to develop her into a woman whose values are primarily acquisitive.

When secondary-school girls leave school to take a full-time job, their going makes a mark against the school's effectiveness. Preventing this in a war defense town tests the potency of any school. However, a real opportunity exists to find the community's need for part-time workers and give the guidance and protection necessary to make working at adult tasks educa-

tional instead of merely lucrative. Schools that have in pre-war times planned with parents and community for guided work experiences, are in a better position to meet this problem than those schools that have not faced the problem educationally in the past. What better opportunity could be offered for a realistic understanding of the problems of labor, of industry and farm, of working mothers and child care, and others—than this direct experience used to give sound insight and understanding that are so necessary if these problems are to be solved fairly in the democratic way. The Junior Victory Army of Colorado is an example of the way secondary schools can make service to the community in cultivating and harvesting crops of benefit to the adolescents in other ways than in money return. Jobs for pay, yes, but only under guidance with value to the adolescent taking precedence over all else.

#### OPPORTUNITIES FOR COMMUNITY SERVICE

The war offers innumerable opportunities for community service through civilian defense and other community chores. You can make an adequate list. Training girls to care for children on the nursery school basis, rather than on the nurse maid basis, offers her training that should be a part of her growing up. Erie County, New York, working with Cornell University provides such a course for high-school girls. The course prepares the girls to care for children of working mothers. The course is taken and the work done under competent guidance. Knitting and first aid courses are also popular avenues for community service.

The opportunity to learn and handle consumer's problems through rationing should be seized eagerly by every school. A little service in filling out blanks and registering may be helpful, but the real opportunity for educating a girl and through the girl her family in regard to budgeting, family planning, adequate nutrition, wise buying (sizes, labels, quality, etc.) is extraordinary. The school that uses the opportunity for consumer education offered by rationing serves both the girl and the community. Money management is a must in the education of all girls. Along with rationing comes the opportunity to learn to utilize what one has instead of turning to new purchases, the opportunity to learn to conserve clothing by mending, cleaning, pressing, remaking, and refashioning. A home economics course can give this kind of education but not all girls take home economics. Provision for this kind of education should be provided for all girls within or without traditional home economics courses. The answer does not lie in making the usual home economics course a constant instead of an elective. The course, to be effective, must take its content from the problems of the duration.

Opportunity for creative participation in art, crafts, dramatics, music and rhythms, painting, and similar activities, opportunity to sing and play in groups and alone, are imperative for the emotional balance of the adolescent.

Valuable in peace, they are many times more valuable in war. Every adolescent girl should have not only opportunities, but inducements to participate informally under seemingly casual, but wise guidance. A medium to express ideas and feelings is therapeutic for adolescence in normal times; it becomes a stabilizer to a girl who faces the insecurity that war brings. The radio and the movies help to develop her scale of moral values. She needs guidance through discussion and study to detect the true from the false in words and behavior. She must learn to weigh and judge and consider what she sees and hears and reads if she is to do her part in managing a confused world wisely. Systematic help in learning to weigh the truth of a radio program, in understanding the purposes of the broadcast and the movie production are important. Insights do not come merely from the experience of listening to the radio or seeing movies. Neither will technical instruction about movie production or the technique of radio production render this educational service.

#### TRAINING FOR THE COLLEGE AND SUPERIOR GIRL

Some of you are thinking that this discussion may fit the girl who is not going to college, but how about the girl who has college preparatory work to do? This girl of larger promise and therefore larger responsibility must have some of the education outlined above and other experiences in addition. This girl of larger ability may or may not need to work for money. If she can be supported and can be spared from work, her work experience should come from her holiday time. Her high-school course should not be accelerated. Youth needs time to mature and this slower growing, if the time is wisely spent, will yield rich returns to the society that provides it. If a girl of recognized promise and ability needs to support herself, the school has the task to help provide for her financially that she too may conserve her time and energy for the study opportunities so important to her growing. No effort should be spared to give her every chance for deferred service. Such a girl needs to do her civic service and to gain understanding outlined here in all the other areas; her health must be protected and she should be encouraged to gain deeper insights and fuller interpretation from the past. If society can allow a sophomore girl of average ability to take time out to learn stenography that she may have a job that pays, it can with profit to itself, permit the superior girl time and opportunities for the longer fuller training that college can give. Society can profit from her deferred service under one condition; her education must be social in character and develop in her awareness of social problems and the will to serve while it develops her ability to carry responsibility. To stay in school and study to understand is her obligation to society and the obligation of the school to her. Until America is invaded and the lives of all are in jeopardy, the short-range idea of getting tasks done quickly at the expense of fuller education must be rejected.

## VOCATIONAL TRAINING FOR GIRLS

Shall girls be given the vocational education, formerly considered masculine,—training in welding, stenography, blue-print reading, radio, and similar courses? Yes, provided at the time the girl is acquiring the skill she is given an opportunity to become acquainted with some of the social implications of the job. To teach Sally Smith to be a welder, then dismiss her to cope with the problems of work relations, labor unions, closed or open shops, and others, without any adequate guidance for understanding the social implications of her work as a worker is exploiting Sally Smith and her sisters similarly treated. This has a larger implication than the mere happy or unhappy adjustment of Sally Smith. If Sally and her contemporaries doing vocational jobs were helped to understand the problems of their jobs in relation to an intricate world system of work, one of the major problems of the modern world would hasten towards a solution. For every vocational and every professional course, short or long, offered to adolescents for the duration or following it, the secondary school is under obligations to teach the social insights and understanding in which the job or the profession has its settings. The cry of lack of time is spurious. Failing to do this now may give opportunity for the cry of "Too Late," in a post-war world.

## CONCLUSIONS

In conclusion, then, the education of girls cannot be considered entirely and apart from the education of all youth in wartime, but there are some special things that apply to girls. Employment that helps girls do satisfactorily the growing-up tasks that are theirs at this stage of development should be encouraged. All employment of girls should be under the guidance of the school and each case should be considered individually in terms of a girl's present needs and her promise for the future. For many pupils a program of part-time school and part-time work will be a helpful program. No program of work and study should bar legitimate recreation and opportunity for civic service. The recreational programs should include opportunities for creative activity as well as amusement. Traditional programs of high school consisting of lessons to be learned in fifteen unit assignments of traditional subject matter with exciting extracurriculum activities to keep pupils interested must go by the board. Work merely for the money to be earned regardless of cost to genuine education and to physical well-being is taboo and the school must make it so. This is an important consideration in regard to the work of all youth, it's doubly important in the employment of adolescent girls. Any program that interferes in the slightest with her development and maintenance of health whether it is done in the name of study, school community activities, work or play is unfair and unwise. The mothers of a future generation must be well and strong.

## Man-Power Needs and School Youth\*

WALTER COCKING

*Director, Consumer Division, Office of Price Administration, Washington, D. C.*

YOUR ORGANIZATION has honored me with a request for comments about man-power needs and school youth. You are probably not concerned with my views on the place of youth with the armed forces, I judge, because your authority on that subject is the Selective Service Board. I assume, also, that to learn about the place of youth in war industry you prefer to hear from representatives of the War Man-power Commission.

As chief of the Educational Services Branch of the Consumer Division in the Office of Price Administration, I feel I can be most helpful if I discuss the volunteer services required of youth in and out of school, in support of the many non-vocational activities relating to the successful prosecution of the war.

Within the limits of this definition, this subject still affords generous room for comment on matters of vital concern to school youth. It permits me, incidentally, to touch upon a theme which, as many of you know, has always been close to me; the development of work-experience programs to equip youth both for war-time and post-war living. It seems to me that in contributing their labor and talents to the war program, young people encounter a brilliant opportunity for learning and for self-development as well as for community service. Their teachers and leaders may themselves see the advantages and possibilities in this situation and thus be eager to assist them.

### WORK OFFERS YOUTH OPPORTUNITIES

For example, a local merchant may be able to use the services of a group of high-school pupils in attaching ceiling price tags or Point Value labels to a large shipment of new stock. It is quite possible that because of the general man-power shortage, a merchant may lack the usual clerical workers to handle this additional operational burden. Pupils who participate in the unpacking, the tagging, and the storing of this merchandise will gain practical experience in storekeeping and in the work habits of a business institution. This experience will be to their credit later should they seek employment of that kind. It will enrich their understanding and experience—whatever field of commercial endeavor they enter. For such exceptional tasks, large department stores organize emergency squads, trained to pitch in wherever the need for help is greatest. In a community of small stores, such a trained emergency squad may be a valuable contribution to

\*A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

the local economy, as well as an excellent means of giving young persons broad business experience.

It has been suggested that labor laws of various kinds, including workmen's compensation laws, prevent school youth from performing services of this kind. The answer to this objection is not hard to find, if schools earnestly wish to develop such a program. One answer may be to give pupils the payment to which they are entitled by their labor as part-time emergency employees. Official rulings have been given by the authorities in at least one state that certain labor laws do not apply to work of an emergency character. Other solutions may be found according to the problem.

#### EXAMPLES OF WORK EXPERIENCE

The frequent emergencies which develop in our war program offer the greatest opportunities for work experience for high-school pupils. Registration for point rationing, for example, will require a volunteer labor force of a million and a half persons, if not two million. Where are they coming from? How many of us can conveniently give up our daily operations to participate in this work? One does not imply that high-school pupils lose nothing by postponing their usual course of study for a few days, but it can be said with confidence that high-school pupils stand to gain a great deal in poise and confidence and competence as a result of assisting in rationing registration. This is a personal gain to the pupil above and beyond the advantage in satisfaction of having contributed to the community welfare and the winning of the war.

An example of another emergency situation may be found in agricultural areas. As different crops mature at different times during the year, there is a strong possibility that there may not be sufficient hands to bring in the ripening food,—the precious food needed for the prosecution of this war—before it rots. We need food for victory. We are rationing food because our need for it is critical. Another record crop will materially ease our rationing problem and so speed our victory.

It is not a new practice for schools to dismiss pupils in harvest time or in planting time to work in the fields. I am not unfamiliar with the sight of children of school age working on the crops.

Today we face a situation where not only school children, but also business and professional workers may be needed to lend a hand in stocking the nation's larder.

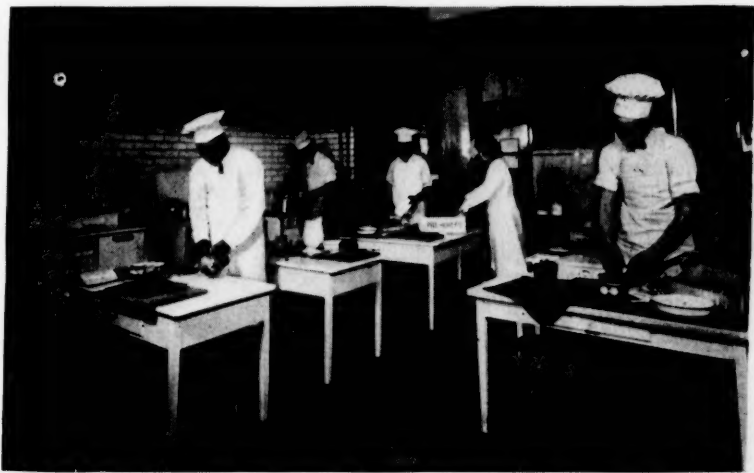
So long as there are field hands available to do this job at a fair wage, it is hardly the duty of the school to mobilize youth for agricultural services. But where the labor shortage is real, where the employment of youth will not deprive adults of their livelihood, schools should seize the chance to acquaint their pupils with the operations of modern farming. The experience will be a revelation.

Aside from these emergency programs there are certain long-term programs which offer equal opportunities for education and community service. Price administration, for example, is not a one-week show. There are tasks which volunteers can support day in and day out, at the local Price and Rationing Boards, at Consumer Interest Centers, at Information Centers, and in the retail outlets. A few of the salvage campaigns may have been short-term propositions, but the collection of waste fats, to name but one example, is a continuing activity which requires persistent encouragement. Instruction in wise buying, in care and repair, in sharing, in the proper use of foods and tools—the whole program of getting the most out of the things we have, in view of the developing strain on our supply lines—calls for, at the present time, instruction and action in and out of school. The organization of car pools, delivery service, swap centers, and canning centers are projects which may be carried on well into the post-war period.

These programs may continue not only during the school period but also in the vacation months. In view of travel restrictions, it will be much easier than usual to maintain a continuing liaison among the members of a school group throughout the vacation months. If it is understood that their activities are contributing to the winning of the war, pupils will rally to their tasks throughout the summer.

#### YOUTH AND THE SCHOOL CAN HELP

The tasks which young people may perform need not be too severely



Boys of the Newton, Massachusetts, High School enroll in the Pre-Chef course in anticipation of helping to reduce man-power shortage.



limited. Youth need not be confined wholly to messenger work and other routine, requiring no great skill or imagination. Those with special talents or administrative abilities should be given every opportunity to exercise them. Mature, intelligent pupils may well be enlisted to join the 75,000 volunteer price wardens who are helping to enforce retail prices and regulations throughout the country.

Because of the peculiar enthusiasm and high idealism of youth it is also worth considering the advantages of giving young people real responsibilities, and the credit that goes with it, in such enterprises as organizing and directing car pools, or maintaining canning centers.

The school's responsibility in these undertakings does not end with organizing and inspiring them. School officials must remain alert at all times to protect youth in these services. The enthusiasm and idealism of young people often betrays them into overwork, resulting in physical, nervous, and moral exhaustion. Moreover, through inexperience, young people may subject themselves to exploitation by older and shrewder members of the community. Above all, in their voluntary services, young people should not be permitted to expose themselves unduly to industrial accidents or injury to their health and growth. In addition to protecting youngsters from these dangers, the school must instruct them in the art of protecting themselves.

Many of us have heard that the attitude of young people today is one of hopelessness. "What's the use? We will soon be in the army," is reported to be the stereotyped comment of the boys. Many boys and girls are said to feel that they have no concern with this war. Another face of the same coin is the attitude of young girls and boys that their domestic life is too tame, that there is nothing worth doing unless they can get into uniform.

I feel all these allegations are a slander against the true character of our American young people. None of them could be hopeless if they understood how much there is to do and how much can be done. None of them would feel fatalistic about going into the army if they understood what we are fighting for and what they too can fight for on the home front. None would feel their lives are tame if they understood how much adventure and excitement there can be in prosecuting the war on the home front.

I pray that the leaders and teachers of youth may find it in their power to bring these realizations home to them all.

## Consumer Education As Conceived by Writers of Textbooks

FRED T. WILHELMS

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*As one step in the three-year study of consumer education that has been undertaken by the National Association of Secondary-School Principals, Dr. Wilhelms has made an exhaustive analysis of the contents of the textbooks in the field. From his report the material for the following article has been drawn. The purposes stated by the authors of the textbooks will be presented to a considerable number of critics for supplementation and evaluation. The results should give valuable guidance to constructive work in the field.*

THOMAS H. BRIGGS, DIRECTOR  
Consumer Education Study

IF CONSUMERS need to be educated as consumers, what should be the nature of their education? The Consumer Education Study of the National Association of Secondary-School Principals is seeking answers to that question and plans later to provide appropriate instructional materials. As a guide in orienting its thinking it has asked, in effect: What pertinent statements have been made before professional associations or in professional publications? What do teachers and others active in this field think should constitute consumer education? What is indicated by the content of courses of study? Judged by what they have written, how have the writers of textbooks in this field conceived the task to be done?

A preliminary summary of findings on the first question appeared in the February, 1943, BULLETIN. The following is an attempt to look at consumer education through the eyes of those who have written textbooks in this field. It is based on analysis of a representative cross section of the available books, selected to include examples of all major types of general consumer education textbooks, but including none of the highly specific works which deal with only one or a few commodities or areas.

### THE TEXTBOOKS STUDIED

Cowan, *Consumer Mathematics*, Telegraph Press, Harrisburg, Pa., 1938.

Floyd and Kinney, *Using Dollars and Sense*, Newson and Co., New York, 1943.

Friend, *Earning and Spending the Family Income*, D. Appleton-Century Co., 1935.

- Gall, *Consumer Economics, An Activity Guide Book for High-School Students*, mimeographed, Webster Grove High School, Missouri, 1940.
- Hausrath and Harms, *Consumer Science*, 1941; and *Let's Investigate* (Laboratory Guide), 1942, Macmillan.
- Hamblen and Zimmerman, *Wise Spending*, Harper and Brothers, 1941.
- Heil, *Consumer Economics*, Macmillan, 1943.
- Kennedy and Vaughn, *Consumer Economics*, and *Consumer Economics Workbook*, Manual Arts Press, 1939.
- Reich and Siegler, *Consumer Goods*, 1937, and *Consumer Problems Workbook*, 1939, American Book Co.
- Shields and Wilson, *Consumer Economic Problems*, and its workbook, *Consumer Projects for Use with Consumer Economic Problems*, Southwestern Publishing Co., 1940.
- Smith, *Your Personal Economics*, McGraw-Hill, 1940.
- Trilling, Eberhart, and Nicholas, *When You Buy*, Lippincott, 1938.
- ZuTavern and Bullock, *The Consumer Investigates*, 1938, and its workbook, *The Investigator*, by Burt and ZuTavern, 1939, Commercial Textbook Co.

#### OBJECTIVES SOUGHT IN TEXTBOOKS

The primary approach in the analysis of each book was to size up as accurately as possible what the author was trying to accomplish with reference to the individual student, in terms of attitudes, habits, and skills. Space does not permit presentation of the complete analysis, which analyzed separately the attitudes, skills, and habits taught, and the facts and principles presented. But even a brief summary of the objectives may be revealing. Certainly the list of purposes which follows is not conceived as exhaustive or final. It is reported primarily as a basis for further study. No one book exhibited all the objectives listed below; and even where the same objectives were sought, there were great differences in relative emphasis, each author stressing those purposes which he felt to be most important. However, in the main, the differences did not seem to arise out of basic disagreements as to the validity of various purposes.

#### *Purposes with Reference to the Individual Student*

1. To bring the student to think of himself as a consumer as well as a producer and to evaluate economic and political matters at least partly in terms of his interests as a consumer.
2. To help him develop a fine sense of values as to what is worth while in life and what is trivial or harmful, and a vigorous independence in thoughtfully determining his own standards and goals as a consumer, without undue influence either from sellers or from social pressures in general.

3. To help him appreciate the value of wise and skillful consumption both as a means of enriching his own life and as a contribution to society.
4. To help him to see and accept his responsibilities as a consumer, to work for the improvement of practices of both sellers and buyers, especially his own practices as a consumer.
5. To help him understand the development and present complex structure of our industrial economy in relation to its effects on the position of the consumer; thus to understand the problems modern consumers face, and their need for education and action.
6. To acquaint him with the history of the "consumer movement" in general, its underlying causes, and its objectives; to clarify his thinking about the goals such a movement may seek and the methods to be used.
7. To help him understand basic economic "laws."
8. To help him understand, in the setting of their historical development, our institutions of money and credit and certain principles and theories regarding money.
9. To help him understand the structure and operation of business—the common forms of business organization; the usual means of financing enterprises; the functions and problems of producers, middlemen, and sellers; and the role in business of banks, stock markets, and the like.
10. To help him understand the distributive system as a whole, and to evaluate its resources and weaknesses from the consumer's point of view.
11. To help him understand the complex interrelationships of business, labor, farmers, and consumers, and influence him to a just consideration of the interests of all.
12. To inform him of the history, principles, purposes, and status of the consumers' co-operative movement and help him understand its significance in its relation to private enterprise, both as an attempt at low-cost merchandising and as a social-economic reform movement.
13. To inform him about sources and distribution of income in the United States, and typical patterns of expenditure (standards of living) at various income levels.
14. To help him see the need, purpose, and significance of budgeting and long-term personal financial management and equip him with the skills necessary to keeping adequate records, planning a budget suitable to his needs, and handling his ordinary financial affairs competently.
15. To encourage him toward systematic saving and provision for the future, and in general toward those management practices, such as the use of checking and savings accounts, which make for financial stability and success. To equip him with the necessary relevant skills.
16. To inform him as to the history, development, and status of consumer credit, the agencies supplying it, its advantages, costs, and dangers; to help him build a reasoned philosophy about its conservative and con-

- structive use, and equip him to avoid exploitation by unethical lenders.
17. To teach him the principles of insurance and its place in a lifetime financial plan, and equip him to plan a sound insurance program and select policies suitable to his changing needs.
  18. To inform him as to the Social Security program, annuities, and other possible provisions aimed at security, especially in old age.
  19. To teach him the principles and some mechanics of investment, and enable him to build a sound long-term program, properly integrated with his savings and insurance program, using the services and protections in the organized securities markets as well as from other sources.
  20. To make him generally intelligent about the tax system and objective about taxes as a co-operative way of buying goods and services, and enable him to keep the records and carry on the transactions involved in determining and paying his taxes.
  21. To help him understand and care for his health needs, through good habits, proper diet, wise use of professional services, as well as sensible home care and use of standard home remedies.
  22. To build up the generalized skills, habits, and attitudes characteristic of good buymanship, with reference to all commodities and services.
  23. To build up a background of information and scientific understanding of materials and equipment in ordinary use and bring him to a certain detached objectivity—not easily swayed by emotion or persuasion—about consumer goods and services.
  24. To help him understand and, when necessary, offset the practices that producers, sellers, and advertisers use to influence his buying; to help him evaluate their claims and arguments steadily against facts and scientific principles, and to act on the basis of intelligence and the best interests of himself and of society.
  25. To help him understand the whole movement toward standardization, simplification, grading, and informative labeling; to enable him to use the resources already available in the form of labels, seals, standards, and the like; and to influence him to work for the improvement and increase of such resources.
  26. To acquaint him with the sources of the information consumers need and enable him to use these sources wisely.
  27. To acquaint him with the protections available to him under national, state, and local laws, and equip him with enough knowledge of ordinary business law to protect his interests in everyday business transactions.
  28. To help him understand the impact on consumers of various types of national, state, or local laws; to see any weaknesses of the present pattern of laws relevant to consumer interests; and to equip and influence him to participate in group action for the building of good legislation.

29. To help him recognize the common patterns of fraud and protect himself from exploitation.
30. To develop such habits, skills, and attitudes in his intercourse with producers and sellers as will enable him firmly to protect his own interests, yet generally to do so tactfully, in an atmosphere of good will and fair dealing, and with a minimum of friction or suspicion.
31. With respect to a selected group of the most commonly purchased or most important commodities, to equip him with the knowledge and skill necessary for their efficient and economical purchase, use, maintenance, and repair.
32. To develop his skill in selecting and employing personal and professional services.
33. To increase his safety in use of consumer goods by enabling him to discern hazards and take protective measures.
34. To help him understand the special legal and financial problems involved in renting, buying, or building a home, especially when the use of credit is involved, and enable him to carry out such transactions efficiently.
35. To equip him with the skills of computation needed in ordinary business affairs.
36. To enable him to read and interpret common forms of financial reports, charts, and graphs.
37. To help him develop a philosophy about his use of leisure time as well as good buymanship in satisfying his avocational interests.

#### *Purposes with Reference to Society*

While working for the above objectives with the individual student, what did these textbook authors envision as the changes consumer education might bring to our society as a whole? To answer this question the investigator frequently had to depend on inference rather than on direct statement; hence the conclusions given below are of a rather subjective nature.

Two general, preliminary statements may be made: (1) A considerable number of textbooks are apparently almost exclusively occupied with sharpening up the individual's economic competence, very little concerned with larger social implications. Very nearly all the books were interested primarily in the individual. (2) When the larger social organization was consciously involved, the basic objective was invariably to help the existing economic machinery work better for all concerned, not to build any new economic order. In this body of consumer education literature there are a good many sharp criticisms of some business practices, but the underlying ideology seems essentially conservative.

The chief social objectives sought seem to be the following:

1. Through wiser and more tasteful choice-making—based on a sound sense of values, understanding of real needs, and philosophy of life—to achieve

greater general happiness, health, and welfare, and a higher level of culture.

2. A greater prosperity and well-being for consumer and producer alike, growing out of increased economic competence of all the people.
  - a. A higher effective standard of living, achieved by more efficient use of incomes.
  - b. Greater financial security for individuals and groups through better programs of savings, insurance, and investment; less dependency and burden of the incompetent on society.
  - c. More efficient and economical distribution, all parties in it being trained and efficient.
  - d. Improved working conditions for labor.
3. A general shift in emphasis in social thinking and the motivation of governmental action from too-exclusive consideration of the interests of producers to balanced consideration of the welfare of consumers. This implies such increases in social controls over enterprise as may be necessary to protect the welfare of consumers.
4. A generally higher level of understanding of economics and of the structure and operation of business — sufficient to facilitate sound economic planning by community and nation, the avoidance or mitigation of the destructive effects of business cycles, and the building of good economic legislation, including sound tax programs.
5. A more rational channeling of production facilities, guided by consumption based on the real needs and best interests of consumers; hence, conservation of the nation's resources. Also, better stabilization of economic activity and reduction of business cycles, since demand based on real needs is less volatile and cyclic than artificially created demand.
6. An improved distributive system making for lower costs of distribution as well as more accurate satisfaction of consumers' wants, to be achieved through careful appraisal of the system and the improvement of practices of both sellers and buyers.
7. Increase and improvement of the commodity information generally available to consumers and a shift to more objective bases of selling, choice-making, and selection; this to be achieved largely through the progressive development of standards for consumers' goods.
8. Improvement of the credit facilities and of small-loan laws.
9. An improved general level of health and safety.
10. Extension of the consumers' co-operative movement. (This objective appears in only a small minority of the books.)

#### ORGANIZATION OF SUBJECT MATTER FOR TREATMENT

As has been noted, most of the authors would apparently agree to the desirability of practically all the objectives reported above. But when we con-



sider the relative emphasis given to them in the texts, we find very great differences.

These differences are shown, for example, by the proportion of space allotted to various types of subject matter. The great part of the subject matter seems to fall into seven categories.

1. *The consumer*: The characteristics of consumers; their situation, resources, and problems in this industrial economy; their incomes and standards of living; their duties, responsibilities, and habits.
2. *Management of personal finances*: Budgeting, keeping personal records, saving, use of credit, and long-term planning of insurance and investment.
3. *Protection and assistance for consumers*: The services of private and governmental agencies; standardization, simplification, grading, and informative labeling of consumer goods; legal protections against fraud and exploitation.
4. *Background economics*: General principles dealing with consumption and production, money, the price system, taxes and tariffs, and others.
5. *Structure and operation of the business system*: Relation of buyers and sellers, the marketing system, advertising, stock markets, consumers' co-operative organization, and other activities.
6. *General principles of intelligent spending and buying, applicable to all commodities and services*.
7. *Information and techniques relating to the buying and use of specific commodities and services*: Especially food, shelter, clothing, health services and products, and recreation.

It would obviously be impossible in many cases to say of one of these categories that a given book devotes precisely so many pages to it, for the materials are inextricably interwoven. But we can get a very rough measure by considering the size of sections devoted predominantly to each kind of matter.

Thus, the consumer (topic 1) has no definite section given over to him and his problems in five of the books, but is given an average of about one-sixth of the space in eight other books, in two of which a third to two-fifths of the entire book is specifically devoted to this development.

Budgeting and financial provisions for the future (topic 2) receive some space in all but three of the texts, rising to well over half the space in one book, and averaging slightly over a fourth the space in nine others.

Protection and assistance for consumers (topic 3), rather difficult to isolate in some cases, seems to occupy about ten per cent of the space in six books and almost fifty per cent in one other. This text devotes nearly its first half to describing the setting and background of the consumer's problems, most of the rest to solutions based on group and governmental action.

A special description of the structure and operation of business (topic 4)

occurs in only four of the books, but it occupies from about a fifth to a fourth of their volume.

Topics 5 and 6 are difficult to distinguish since general principles of buy-manship may very well be developed in the setting of specific commodities. However, nine of the books contain fairly definite generalized sections apart from any more specific treatments of particular commodities. These sections range from brief treatments to something less than one-tenth of a book's space.

The emphasis given to the buying and using of specific commodities (topic 7) shows the clearest division of all. The books may almost be classified according to their relative emphasis on particular commodities and on general social problems. One book is practically made up entirely of a sequence of discussions of groups of commodities. Two others devote about three-fourths of their space to such treatment; three more give it a fourth to two-fifths of their volume. The others give it some space.

#### *Form of Organization*

Even if the data presented were precisely the same in all cases, emphasis might be considerably varied by the form of organization.

Thus, to take two diametrically opposite bases of organization, one might use as integrating centers the most important classes of goods and services which consumers buy and use, and bring into the treatment of each the related social generalizations as well as the specific commodity information. Or one might reverse the process, center his treatment around great social problems and bring in specific commodity information and techniques of buy-manship only as they supported the generalizations.

However, in practice, none of the textbooks studied follows completely either form, although one or two approach each extreme. If there can be said to be any "typical" organization, it is of a "mixed" type. It is likely to contain several "general" units, probably including treatments of the situation and problems of the consumer in our modern economy, the agencies through which consumers may get assistance, protection, and information (including treatment of standardization and labeling), consumers' co-operation, budgeting and general financial management, and possibly advertising. In addition, it is likely to have specific units on the most important phases of consumer-buying, usually dealing with foods, clothing, shelter, insurance, health (given increasing prominence recently), and leisure-time activities (still badly neglected in most cases).

Perhaps this dual organization is simply recognition of the dual nature of the problems of consumers and of consumer education. There are areas in which the greatest contribution will be the sharpening of the individual consumer's competence. There are other areas in which the individual's action is almost meaningless save in the context of group action. The two are closely related and yet they are somehow elusively distinctive.

## The High School Victory Corps\*

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It soon became apparent after Pearl Harbor that we were in a war that threatened our very existence. A feeling that we were not adequately prepared pervaded. The foremost question was, "Can we become adequately prepared in the time available?"

This required thinking in national terms. War is a national activity, not one that forty-eight states and the thousands of communities within the states can each by itself successfully prosecute. We began to react as a nation.

Soon we began to plan an armed force exceeding 10,000,000. The draft age was dropped to eighteen. It became apparent that practically every able-bodied boy on becoming eighteen years of age would find himself in the armed forces. This fact in itself carried tremendous implications for pre-induction training at the high-school level.

The immediate implications for youth under eighteen do not stop with preparation for enlistment. Consider the demand upon our home-front economy by the fact of our having an armed force of more than 10,000,000 engaged in global war. Add to this our responsibility for sending food and war material to our Allies. Who is to perform the work on the home front necessary to the meeting of the total demand upon it? Are those who are above eighteen years of age sufficient unto this task?

Surely no one can face this situation realistically and not see in it very important implications for youth under eighteen. Immediately we ask ourselves, "How can the six and a half million youth in our 28,000 high schools react most constructively toward our national crisis?" Obviously guidance in national terms is suggested. To meet this need the High School Victory Corps was proposed in September 1942 by the United States Office of Education.

The United States Office of Education cannot compel any high school to accept it. It does not wish to do so. The assumption is, well borne out by experience up to date, that our high-school youth and those who administer our high schools want to know what it is they can best do to help win the war. They recognize the need for national guidance in meeting war needs. The High School Victory Corps was set up to help in this respect.

Within the individual high-school membership is voluntary. The six memberships provide a wide variety of opportunities for participation so that practically every individual can find his place in the total all-out war effort whether he be destined to serve in the armed forces or on the home front.

\*A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

## LONG-TERM AND EMERGENCY VALUES

Is the High School Victory Corps Program, as it has been proposed in the official pamphlet, partial? Does it exclude consideration of long-term values? There has been considerable criticism at this point. Let us consider this for a moment.

At the time the Victory Corps was proposed the war was actually on us. It was not a case of getting ready for war that might come five or ten years hence. Naturally this situation forced foremost the question, "What are the things we most need the quickest?" The answer to the schools from those upon whom we place primary responsibility for winning the war was physical fitness, mathematics, science, pre-aeronautical training, and English, insofar as accurate reading and writing are concerned. Vocational education has been definitely recognized from the beginning of the war threat as of special importance in wartime. The official High School Victory Corps pamphlet places emphasis upon these areas.

This emphasis does not imply that other parts of the high-school curriculum are not of fundamental importance. If you make adaptations at certain points in a well-built house to withstand an unprecedented storm that has suddenly come upon it, you are not disregarding those parts of the structure which stand back of the particular adaptations you make to the storm. On the battlefield physical skill and endurance and certain technical skills and knowledges are the immediate factors that determine whether the soldier survives or his enemy does. However, any thinking person realizes that back of the soldier is the culture out of which he has come. Into this culture have gone the contributions of the social studies, music, art, literature, and all the humanities. All influences that make for good homes, sound individuals, intellectually and emotionally, are back of the soldier for democracy. These are foundational to any specialized trainings. They cannot be left out of any long-term considerations. The emergency adaptations to special needs recommended in the Victory Corps pamphlet were such as could be based on the assumption that these foundational character-making values were well established and could be relied upon to stand up under the stress of the emphases suggested. All suggestions made with reference to special adaptations would probably, when completely complied with, take no more than half the school day and even then most of the content of this half would consist of subject matter long since accepted as belonging to a good educational program.

However, this is not to say that no definite provision was made in the Victory Corps pamphlet for the more long-term values. As a matter of fact, the outline is there which, when filled in by interpretative discussion, provides for the long-term values as well as for the immediate emergency. Those responsible for administering the Victory Corps have from the beginning encouraged this kind of discussion in order that all essentials for both immediate



The service organizations of the Ellicott City High School, Maryland, pledge their service to country, community, and school through the High School Victory Corps.

and long-term needs receive proper attention. Much such discussion has occurred and has resulted in many interpretative statements in *Education for Victory* and other educational publications. It should continue.

It should not be overlooked that there are many possibilities of lasting good in what we are doing in the schools to adapt to war needs. First, there is extensive overlapping in skills and subject matter content as between war activities and peace-time occupations. Second, there should be important carry over in method of procedure. In war our needs are placed in greater relief so that we can more clearly see them. Then we proceed by the most direct methods we can devise to meet these needs. Since it is a matter of life or death we get right down to the business of straight thinking and acting. It is a case of intelligence at work. Were the peoples of the world at all times so intelligently to address themselves to the problem of living we surely would find the way to prevent war.

The High School Victory Corps offers the 28,000 high schools and six and a half million high-school youth of our country a national framework in which to respond to the great national crisis presented by a global war in which all that we believe in is at stake. It is based on the assumption that as a matter of necessity in this crisis we must react as a nation, that each of us wants a sense of identification with the national cause. We believe that in times of national crisis we can as free individuals devise means of reacting as a nation without surrendering respect for local autonomy as embodied in our form of government. The High School Victory Corps aims to be such a method of national adaptation to a war crisis for the high schools.

## Educational Leadership in Consumer Education\*

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AMERICA is set out to win a war; a war designed to do away with oppression and Nazi modes of living; a war to create a better world. I am certain that America plans to do everything possible in order to achieve these goals. To do this we must maintain our fighting front, selecting the finest of our men and the most skillful of our advisors. We have to maintain a production front, keeping constantly employed and trained the most skilled mechanics we can produce. We must also maintain a home front, which means we will need to develop complete co-operation on the part of the American public and we will maintain with that a high degree of public morale and support. Industry, business, military forces, and our government will do everything possible to maintain the military and production fronts. Those of us engaged in education have a significant contribution to make toward the maintenance of a home-front program.

In order for people to co-operate they must organize their information, understand this information, and develop the proper attitudes toward the problems that we face. The government must formulate clear and adequate regulations. The public must observe these regulations voluntarily and, if necessary, by enforcement. We cannot afford to have violations. The public must also maintain confidence in the program and believe that what we are doing will accomplish the job. To get this phase of the program accomplished, we will need not only the help of the government, but we need the help of organized groups in American life; both school and non-school. These groups have a very important function to discharge. They must be responsible for developing in American communities adequate understanding and proper attitudes among the people they serve. The press, radio, movie, and all government agencies will continue to disseminate accurate and continuous information. The government will give leadership to national and state organizations and their leaders in the form of counsel, information, and helpful suggestions. But these will not reach every American citizen unless the schools, clubs of men and women and all other professional, social and civic organizations join together to follow up this information with a complete and thorough program. This means that while the newspapers are primarily concerned with giving out information, we are concerned with following up this informative program to make certain that actual understanding is developed.

\*A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

In doing this let me suggest a few things which schools and organized community groups can do. First of all, they must turn their attention to modern problems. Too long we have stayed in the relatively safe realm of uncritical issues. In the second place, we must ourselves constantly keep people informed, particularly of the reasons and effects of events and regulations upon their own living. Third, we must interpret nation-wide information in terms of the needs of local and regional groups. The Federal government will determine in war the policies which our country needs to accept, but the actual details and relationships growing out of these general policies must be re-interpreted in the life of each community as it goes about its daily business of living. Fourth, we need to give leadership and direction to public discussion of the problems, issues, regulations, and implications. Schools and community organizations have long developed capable leaders and these leaders must now be turned to the job of developing understanding. Public forums are one of the means of doing this. Fifth, we must see that people understand what the problem is and how it is being solved. Favorable attitudes will result only from complete understanding. In a democracy people are prone to resent regulations unless they see the need for them and are led to believe they are established by impartial and equitable means.

Let me refer now to the educational job and suggest some techniques with particular application to the problem of the economics of the home front. I should like to illustrate with problems of price control and rationing.

In the first place, price fixing is not tinkering with the inevitable laws of economics. For years our schools and colleges have taught the classical theory of economics and have led us to believe that certain principles which have resulted in practices are inevitable, and that if they can be changed they can be changed only slowly. We must realize that these theories of economics are man-made and may suit conditions of their times. They must now be re-made to suit the problems we face today. The classical argument implies an atomistic or mechanistic concept. We have been led to believe, for instance, that increased purchasing power, increased demands, or shortages will always inevitably result in increased prices. We have thought there is no other way to handle it. This has been reflected in our attitude on letting prices seek their own levels. It is a rather simple theory and follows the general principles of psychology. It has led us as a nation into a theory of social and economic living which has caused our social institutions to be far more conservative than our scientific and psychological advancements.

This classical concept has been abandoned by science for the theory of relativity or theory of interaction. Our social theories in this country are so far behind our theories in biological science that we are either going to have to change them or crack up economically. Human problems, social problems, economic problems are mutually interdependent. There is emphasis today upon the theory dealing with what we might call an inflationary spiral. This



spiral involves purchasing power, wages, prices, demands, shortages, and the physical expectations of the masses of people. They are all interdependent. Cutting any one link of the spiral may temporarily stop other actions. But to deal effectively with the spiral, inflation in this case, we must work jointly on all phases of it. Price control, rationing, wage stabilization, bond buying, taxes, and credit control are all parts of the inflationary spiral. In order to control inflation we must work on all of them. There is nothing mechanistic about them. This is from one point of view one way of dealing with economic problems. The schools haven't been doing this.

Classical economics taught in American schools has conditioned us to believing that economic controls are undemocratic monsters; that they are something which may be akin to autocracy, and that they are within themselves contrary to the practices of democracy. We should divorce the technique of handling economic problems from the ideals and principles of political democracy. We may handle economic problems many ways and still have the highest type of democracy existing in our nation. To have economic controls to stabilize our economy is no more undemocratic than to have policemen on the streets to see that robbery and murder do not run rampant. It probably takes a war to get us to see these things. The school must reorient its program the modern way. We must get out of the cellar of imitative thinking—get creative to aid the war, aid the forward march of progressive thought. We cannot weigh our children down with untruths. One of the most deadly things we can believe and teach is that history repeats itself. This is fatalistic and unworthy of intelligent people.

A second positive statement I should like to emphasize is that price control and rationing must go together. We can control prices without rationing, but we cannot ration without controlling prices if we expect the lower income people to share the goods that are available. Rationing means nothing unless it means that goods are reserved for all levels of income, and this can be done only by price control. Rationing is the American way of assuring an equitable share of distribution of resources of our country. What does it profit a man with an income of \$1000. if he has reserved for him two pounds of sirloin a month and he has to pay a dollar a pound for it?

Rationing, or allocations, or priorities are related techniques. Early in the war we established a priority system for industries so that the most essential ones might secure the needed raw materials for producing military and essential civilian goods. This was done to assure that military needs were met by the proper distribution of raw materials before these materials were consumed in meeting luxury or non-essential civilian demands. Hence, steel must go into tanks and guns, and men must be put to making them rather than to making private pleasure cars. Steel, therefore, is allocated to essential needs.

Consumer goods are rationed both to direct the available supplies where needed and to curb excessive or inflationary spending and to make an orderly process of consumer buying rather than turning it into a bargain counter or mad rush procedure. It substitutes order for the theory of "first come, first served" or "he who has the money can buy." Rationing then can be used both to distribute shortages and control purchases. England, for instance, allows a man a suit every three years. This is partially due to shortage of wool but it is also done to turn incomes into war taxes and to release men from textile factories for war service.

Price control, rationing, and the whole control of inflation will fail if people do not understand them, their benefits and their potential dangers, and then determine to make them work. Public support in the Congress and over the trading counter is necessary. Here is a great responsibility of the schools and of non-school adult groups.

What then are some of the issues we can discuss with children and adults through the schools and organized groups? Let me analyze a few:

1. Inflation will hurt us all; it will ruin the salary and wage earner; it will cause business dislocations and will inevitably lead to another major depression where business goes broke and farmers lose their lands. Any man who doesn't believe this is too stupid to see anything beyond his own table and bed.
2. *Some of us* can't get away with cornering profits or goods for himself and get fat without dragging *all* of us down. This is true of groups and individuals. *We are all one*. We ought to understand this. We must learn it. Don't let people dupe you on this. Teach it to your pupils. Shout it everywhere. It is as true of the home front as it is of the military front. The man who tries to break it is selfish and undemocratic. He is a modern pirate. We ought to develop such morale in this country against this sort of thing that groups or individuals trying it would fear social ostracism.
3. If prices are not controlled our war bonds which we have bought will be worth less and less, while the man who lives on borrowed capital (which is an inflationary tendency) will profit most. Price control is necessary if the man in the street and on the farm wants to have money after the war. Don't just tell people this. Prove it. It is easy to do.
4. If we don't stabilize the cost of living the whole war effort will suffer.
  - (a) The interests of defense workers will be diverted to demanding higher wages to keep up with rising prices. But you may say men don't work for money; they will be patriotic. Right, but men work for the necessities of life. And don't tell me also in the same breath that price control will hamper the war production because business needs profit freedom to produce to the limit. These ideas are an inseparable part of the same thing—no one can profit at the expense of another.

- (b) Sacrifices are not equated in an uncontrolled war program for each person doesn't have equal power to control his life. If sacrifices are not equated as far as possible, civilian morale will be lower. This is bad. But soldier morale will be lower if some families profit greatly and other families suffer while men are risking their lives to support social righteousness.
5. Inflation raises the cost of the war. It is calculated that of the American cost of the First World War from 1917-1920, which was 39 billion dollars, almost forty per cent was due to inflation. If money is worth little when contracts are made and worth more when debts are paid, hardships ensue. This is a platitude but we need to make it clear to men everywhere. It isn't clear. If prices had continued to rise at the rate they rose from Sept. 1941 to May 1942, then price control has to January 1 of this year saved the average American family \$12.89 in clothing alone; \$2.09 in beef and veal; \$3.77 on pork, and \$1.95 on canned goods; then there are savings on drugs, other food-stuffs, furniture, laundry and cleaning services, rents and many other cost-of-living items. For this service each American is charged 9 cents each month.
6. Inflation makes for economic trouble after the war. Explain 1926-1929; 1929-1937; our pupils in high school don't know what this meant. Make it so clear no pupil can forget it. We adults remember that, but men are queer animals. We tend to forget our troubles when things go well. This is a God-send to man in general, but it may mean his downfall. Now when our standard of living today has never been excelled by ourselves or any others, we tend to forget what happened ten years ago. We must not forget it, if forgetting leads us to the brink of destruction.

This is the time for school men to be bold, creative, and thoughtful. Don't let attacks by the ignorant, imprudent, or deliberately designing group steer you from your course. Some pressure groups with selfish purposes may try to make use of the press and radio to ridicule the gains our profession has made and thus undermine public confidence in American education, an act which if committed would be an act of treason against the welfare of the American people. Don't spend your time fighting it. This puts you on the defensive. It is fatal warfare. Get on the offensive for the job ahead and do it and do it well. The job is three-fold: (1) to give our youth who will enter the military forces at eighteen years of age every possible skill and strength which they will need to serve themselves and their country, and (2) develop an understanding among their parents of what they are fighting for, how we must live at home, and how we who stay can and must think and act if we are to achieve the goals for which they are giving their lives, and (3) to make men good enough to make a good peace. Intellectually, we are not yet ready for peace.

I don't know whether or not education can do this. I would like to think it could. It yet remains to be proved. What part will you take?

## Pre-Induction Courses in Mathematics\*

### FOREWORD

THE UNITED STATES Office of Education has received urgent and repeated requests from individuals and organizations throughout the country to give the secondary schools detailed suggestions for the teaching of mathematics for pre-induction purposes. In December 1942, the Office in co-operation with the President of The National Council of Teachers of Mathematics appointed a committee to make a survey of the mathematical needs of the armed forces and upon this basis to make a report concerning what the schools can do for the emergency. The committee consisted of:

Virgil S. Mallory, Professor of Mathematics, New Jersey State Teachers College at Montclair;

William D. Reeve, Professor of Mathematics, Teachers College, Columbia University;

Giles M. Ruch, Chief, Research and Statistical Service, U. S. Office of Education;

Raleigh Schorling, Professor of Education, University of Michigan; and  
Rolland R. Smith, Specialist in Mathematics for the Public Schools of Springfield, Massachusetts, and President of the National Council of Teachers of Mathematics, also chairman of the Committee.

Post-induction training in the armed forces is based in considerable measure on manuals of instruction prepared especially for the technical occupations of warfare. It was the thought of the Committee that detailed analyses of a large number of these technical and field manuals would provide a first approximation to the mathematical needs of the military establishments, or at least afford a basis for evaluating the general character of the curriculum modifications in secondary-school mathematics dictated by the emergency. To this end, the Committee requested and received the fullest co-operation of the Army, the Navy, and the Civil Aeronautics Administration.

The Civilian Pre-Induction Training Branch, Industrial Personnel Division, Services of Supply, War Department, selected approximately fifty of the army instructional manuals covering occupations for which there is the greatest training need. These manuals were studied in detail and notes made of the various types of mathematics used, and of the mathematical background involved. In like manner the Committee analyzed about twenty navy training manuals made available by the Training Division, Bureau of Naval Personnel, Navy Department. Similar consideration was given to the training materials of the Civil Aeronautics Administration. The mathematical needs of typical war production industries were also considered by examination of about fifty unit courses used in the Federal-State program of Vocational Training for War

\*Reprints of this report may be had at 10 cents each postpaid from THE MATHEMATICS TEACHER, 525 W. 120th St., New York, N. Y. Larger quantities may be had at a reduction.

Production Workers conducted co-operatively by State Boards for Vocational Training for War Production Workers conducted co-operatively by the State Boards for Vocational Education and the U. S. Office of Education.

This report has been submitted to and approved by:

The National Policy Committee for the High-School Victory Corps

The Civilian Pre-Induction Training Branch, Industrial Personnel Division, Services of Supply, War Department

The Training Division, Bureau of Naval Personnel, Navy Department

The Civil Aeronautics Administration, Department of Commerce

JOHN W. STUDEBAKER

*U. S. Commissioner of Education*

Washington, D. C., February 1943

#### REASONS FOR THIS REPORT

It is expected that the United States Army will increase to at least 7,500,000 by the end of 1943. The Navy and Coast Guard will in this period be enlarged by several hundred thousand. The total of all the armed forces may ultimately exceed 10,000,000. This further expansion in a mechanized war will increase the present shortage of men and women trained in mathematics and in practical physical science, in both the armed forces and supporting war industries.

Of the men inducted into the army, a large majority must be given some technical training in either pre-induction or post-induction courses. The navy requires an equally high per cent of skilled personnel. The navy operates nearly a hundred post-induction schools, and the army a far greater number. An analysis of the various technical manuals used in these schools provides convincing evidence that much time is now wasted teaching simple mathematical principles and skills to many men who ought to know these things when they are inducted.

Many of the jobs classified as technical in the army require only simple arithmetic. However, if one takes the technical manuals in the post-induction courses as a criterion, some of the least technical jobs require a level of mastery of mathematics higher than that needed by such workers in civilian life.

The technical manuals of the armed forces show that there are many mathematical applications that only the military organizations should teach, but it should not be necessary for them to give instruction in elementary mathematics.

The problem confronting mathematics teachers of the high school is "How can instruction in mathematics be modified, and that immediately, so as to give the utmost aid in the emergency?" The crux of the problem lies in what can be done for boys and girls now in the last one or two years of the secondary school. For this reason, detailed suggestions have been given for

pupils of this group who are not now studying mathematics. The time factors for the students receive due recognition in the recommendations which follow. General suggestions are given for those enrolled in the sequential courses.

#### RECOMMENDATIONS

The emergency need for boys and girls trained in mathematics has focused attention on the highly technical features of our mechanized civilization. The armed services and the supporting war industries need boys and girls trained in the proficient use of mathematics ranging from a real mastery of arithmetic fundamentals and such practical uses as are found in courses in general mathematics to the uses of higher mathematics in meteorology, ballistics, and other branches of science. Girls trained in mathematics are needed to replace men in industrial and other civilian positions which require the same range of uses of mathematics.

This range of uses of mathematics is very wide. Every high-school pupil must be able to compute with assurance and skill and many will be called on to use the simple algebra, informal geometry, scale drawing, and numerical trigonometry of the right triangle now taught in most courses in general mathematics. A smaller number will be needed who have mastered all of the sequential mathematics of the senior high school and college. The range of uses of mathematics is as wide as the abilities of high-school boys and girls. Intelligent guidance should guarantee that every high-school pupil studies mathematics according to his ability. The four-year sequence in mathematics, including trigonometry and solid geometry, should be taken by those students who have a real interest in mathematics, who are capable of mastery of the subject, or who are likely to use mathematics in their further training and ultimate occupation. Counselors must realize the need for certain mathematical skills and understandings.<sup>1</sup> On the other hand, it is wasteful to put pupils into such courses if their aptitudes and abilities indicate that they cannot obtain a secure mastery of the material they are studying. It should be remembered in every case that unless the mathematics taught is mastered thoroughly, it will neither be of practical use nor will it serve the other purposes of mathematical study.

The demands of the armed services and war industries for pupils well trained in mathematics are of immediate concern. These demands are equally urgent in the armed forces and in industrial production. They need not, however, conflict with the needs of boys and girls for adequate training in mathematics for future civilian life. The emergency calls for more effective teaching

<sup>1</sup>The following references will be useful to counselors and other guidance officers:

Victory Corps Series, *Guidance Manual for the High School Victory Corps*. In press. One free copy will be distributed to each high school when printed. Additional copies must be ordered from the Superintendent of Documents, Washington, D. C.

*Minimum Essentials of the Individual Inventory in Guidance*. By Giles M. Ruch and David Segel. U. S. Office of Education, Vocational Division, Bulletin No. 202. Occupational Information and Guidance Service Series No. 2. For sale by the Superintendent of Documents, Washington, D. C. Price, 15 cents.

of mathematics with adequate practice and practical applications to the end that pupils can use mathematics in a wide variety of practical situations. Mathematics learned as mechanical manipulation only cannot have its fullest value either in the immediate emergency or in future civilian life.

The type of subject matter, the time element in teaching, and the number of practice exercises must be so selected and modified that a maximum of understanding is secured. Accuracy and skill in application must be a main consideration, not the amount of material covered. Instead of special courses in mathematics, practical problems can be used both to motivate and to point out emergency uses. Recommendations are made later concerning material which can safely be eliminated from the sequential courses to assure this more effective teaching as well as to permit the introduction of immediate applications to fit the emergency. Good teaching of mathematics, modified as suggested, is more valuable than specialized mathematics courses given by teachers not qualified to teach them, or taken by pupils who do not have the necessary foundation in mathematics and science or the maturity for their successful mastery.

Some modifications in content of the sequential courses are advisable both for the war emergency and for future civilian uses. The mathematics taught should be practical to the extent that it has immediate application, that it is needed for other essential mathematics, sciences, or other advanced courses, or that it pertains directly to the war effort. The immediate needs for war service should be met by reduction in the amount of less important material and the substitution of material which is more essential.

Recommendations for courses in mathematics are not confined to boys. Girls are needed to replace men in all branches of industry and civilian life in which mathematics from its simplest elements to its more advanced study is used. The need is great for women to fill vacancies as laboratory technicians and assistants, as junior engineers, as workers in industry, and in the teaching profession. There is also immediate need in civilian work, in the signal corps and in industry for girls who are high-school graduates.

Finally, the high school is confronted with the need for effective guidance of boys and girls so each will study that mathematics which he can master and use effectively. Three general categories of pupils are recognized for purposes of the specific recommendations which follow.

1. *Pupils with little or no mathematical background.* This group consists of boys and girls who have had not more than one year of training in mathematics beyond the eighth grade. If these pupils are near graduation, induction, or employment, they should take work of the type suggested by the special one-semester course described later in this article. If they still have a year in school, they should take the special one-year course described immediately below.

2. *Pupils who have studied mathematics for two years beyond the eighth*



*grade but who are now studying mathematics.* These pupils will ordinarily have had one year of algebra and one year of geometry. If they are near graduation, induction, or employment, they should take work of the type suggested by the special one-semester course described later. If they still have a year in school, they should take the special one-year course described immediately below. For these pupils the one-year course can be more intensive than for those who have little background in mathematics.

3. *Pupils who are now enrolled in the four-year sequential mathematics courses.* The more capable of these pupils should continue in that work and should not substitute emergency courses in mathematics. The curriculum modifications needed in the basic sequence in mathematics are those which secure more effective teaching, permit the introduction of practical applications related to the war effort, and correct deficiencies in computational skill. Suggestions about material which may safely be omitted to make it possible to offer enrichment material and to introduce fundamentals of arithmetic and practical applications are given later. It should be realized that, under the impetus of the war, enrollments in this sequential work will tend to increase. This necessitates careful guidance and selection. These courses should be reserved for those who can pursue them with satisfaction and high achievement.

#### A SUGGESTED SPECIAL ONE-YEAR COURSE

Because of the limited time available, the Committee had to choose between the alternatives of concentrating on the most critical phases of pre-induction courses in mathematics or attempting a full coverage of all phases of such training, thereby delaying publication so long that the report would have no usefulness during the present school year. The decision was reached to prepare a rather detailed outline of this special one-year course, leaving the way open to supplementary reports should the need develop.

The number of topics studied by any given class will depend upon the ability of the pupils. Many classes will be able to cover the entire outline. Mastery of selected topics is of greater value than superficial knowledge of this entire course.

#### *Arithmetic*

The importance of the fundamental arithmetical skills with integers, and fractions, both common and decimal, has been so generally accepted as a part of the training of every American citizen, that we should expect all pupils who go through our elementary schools to exhibit proficiency in such skills and their application. Many pupils, however, have been so poorly trained that there is a large number with little mastery of arithmetic. Such a situation should not be permitted to continue.

The fundamental processes with integers and fractions, both common and decimal, which are ordinarily taught in the first six grades of the ele-

mentary school furnish a basis for the real applications which should follow in the elementary and the secondary school. Arithmetic correlates well with algebra, informal geometry, and numerical trigonometry. All of these are important in solving war-time and peace-time problems.

A study of the various technical manuals suggests that both abstract drill and practical applications should be very simple. It is far better to build confidence and to strive for accuracy with simple illustrations than to confuse the pupils with involved computations that seldom, if ever, occur in the actual jobs of the fighting forces. This suggestion applies to the work in algebra and geometry as well as to arithmetic.

A detailed outline follows:

I. Whole numbers

1. Reading and writing large numbers
2. Computation
  - a. Addition of not more than six addends with not more than six digits in each
  - b. Subtraction with not more than six-digit numbers
  - c. Multiplication with the multiplicand containing not more than five digits and the multiplier not more than three digits
  - d. Division with not more than three-digit divisors

II. Common fractions and mixed numbers

1. Meaning (including the meaning of a fraction as an indicated quotient)
2. Fundamental operations—denominators should be mainly powers of 2 up to 64

III. Decimals

1. Meaning
2. Place value in numbers
3. Fundamental operations (limitations similar to those under computations with whole numbers under I above)
4. Changing common fractions to their decimal equivalents and *vice versa*. Ability to use tables of equivalents

IV. Per cents

The work on per cents can be improved by practical illustrations from aviation and shop practice. In the post-induction manuals uses are made of all three cases of percentage. Practice should be principally on the first two cases: finding a certain per cent of a number and finding what per cent one number is of another. The groundwork for teaching the second case should be laid by comparing two numbers as common fractions and as decimals. The topic of ratio and proportion affords an opportunity for refreshing the comparison concept.

- V. Averages (arithmetic mean and median)
  - 1. Meaning
  - 2. Computation (ungrouped data)
- VI. Square root (see under *Algebra*, 6, i)
  - 1. By division (trial and error)
  - 2. By table (interpolation)
  - 3. By the algebraic method
- VII. Information graphs
- VIII. Scale drawings (see under *Informal Geometry*, II, 2, a)
- IX. Keeping simple accounts
- X. Applied problems

### *Informal Geometry*

Geometry has a double value, first as knowledge and second, as a way of thinking. The importance of geometry in giving information of value in the daily life of every well-educated citizen has been neglected, if not entirely overlooked. In making an object of any kind, one must first conceive the object in order to avoid waste of time and material. He must know the shape and the relation of the various parts, must be able to measure them, and finally, to fit (locate) them in their proper places in the completed object.

In building a special one-year course it must be decided what values of geometry are paramount for the national emergency, what content material should be selected, and what methods should be used to facilitate its teaching. For this purpose, informal geometry should include:

*Intuitive geometry*, where one looks at a figure and says that something is so because it could not be otherwise. Example, "If two straight lines intersect, the vertical angles are equal."

*Experimental geometry*, such as cutting out a paper triangle, tearing off the angles and then placing them adjacent to show that their sum is 180 degrees.

*Observational geometry*, which consists of recognizing objects as typifying certain geometric forms, seeing certain relationships and important facts that exist between them, such as, "Any angle inscribed in a semi-circle is a right angle," or, "If two parallel lines are cut by a transversal, the alternate interior angles are equal."

*Geometric constructions* of a fundamental type, such as bisecting a line or an angle.

In this special one-year course teachers should realize that there will be little or no place for deductive proof. The early geometric knowledge of the race began with simple observations, intuitions, measurements of real objects, and recognition of their relations to each other. The classification of such knowledge as the race had attained and the organization of the facts of their experience into a deductive science were outgrowths of man's earlier struggles. As with the race, so with the individual; the real experiences with the facts

should come first and the more formal propositions and their logical proofs later. It is conviction in the minds of the pupils that should be sought. Few pupils can understand what they have not physically perceived.

In all of this work, the choice of content and the emphasis in instruction should be placed upon these topics which have a practical bearing in the ordinary affairs of daily life.

The content of this part of the course should consist of:

I. Geometry of form

1. Shapes seen in nature

2. Geometric concepts

a. Point

b. Line

(1) Straight

(2) Broken

(3) Curve

(4) Horizontal

(5) Vertical

(6) Parallel

(7) Perpendicular

c. Plane

(1) Plane figures

(a) Rectilinear—triangle (scalene, isosceles, and equilateral), quadrilateral (trapezoid, parallelogram, rectangle, square, and rhombus), and regular polygons

(b) Curvilinear—circle, parabola, and ellipse

d. Solid

(1) Kinds

(a) With plane faces—rectangular solid, prism, and pyramid

(b) With curved faces—cylinder, cone, and sphere

e. Angle

(1) Measurement

(2) Kinds

(a) Acute

(b) Right

(c) Obtuse

(d) **Straight**

3. Similarity

a. Types of similar figures

(1) Triangles and other plane figures

(2) Reduction or enlargement of similar figures

(3) Photographs and maps

(4) Scale drawings

4. Congruent triangles (no proofs)
5. Mechanical drawing
  - a. Instruments to be used if they are available
    - (1) Ruler graduated to thirty-secondths, to tenths of an inch, and to millimeters
    - (2) Protractor
    - (3) Compasses
    - (4) Draftsman's instruments
      - (a) Drawing board
      - (b) T-square
      - (c) Triangles ( $30^\circ$ - $60^\circ$  and  $45^\circ$ - $45^\circ$ )
  - b. Skills to be learned
    - (1) Drawing angles with a protractor
    - (2) Drawing parallel and perpendicular lines
    - (3) Drawing rectilinear figures
6. Constructions with ruler and compasses
  - a. Circle
  - b. Bisecting a line segment
  - c. Bisecting an angle
  - d. Copying an angle
  - e. Dividing a line segment into more than two equal parts
  - f. Constructing triangles, given
    - (1) Three sides
    - (2) Two sides and the included angle
    - (3) Two angles and the included side
    - (4) Two sides and an angle opposite one of them

## II. Geometry of size

- I. Direct measurement
  - a. Appreciation of the limits of accuracy in measurement and of the fact that all *measurement is approximate*
    - (1) Limits of accuracy
    - (2) Significant digits
    - (3) Rounding off to reasonable results
    - (4) Common sense checks
  - b. Estimating and measuring
    - (1) Lengths—using ruler, compasses, calipers, and squared paper
    - (2) Angles—using the protractor
    - (3) Area of regular and irregular figures using ruler, squared paper, and simple formulas
    - (4) Volume and capacity
    - (5) Weight—avoirdupois, Troy, and apothecary's
    - (6) Time, including the international 24-hour day
  - c. Applied problems

## 2. Indirect measurement

## a. Scale drawing (commonly used in air and marine navigation)

- (1) Reading and using scales
    - (a) Two forms: 1 in. = 6 ft. or representative fraction (R.F.)  $1/72$
    - (b) Changing a scaled distance to its value in relation to the original object
    - (c) Determining proper scaled distance to represent an object
    - (d) Using grids (squared paper) to make scale drawings
    - (e) Using metric scales
    - (f) Using ordinary ruler marked with a scale
  - (2) Drawing geometric figures to scale
    - (a) Rectangles
    - (b) Triangles, given three sides, two angles and a side, two sides and included angle, two sides and the angle opposite one of the sides
    - (c) Using triangles (including oblique triangles) to solve surveying and navigation problems (See also under "Use of vectors" below)
    - (d) Using lines drawn on a grid to solve distance, rate, and time problems
  - (3) Method of representing directions
    - (a) Mariners' compass
    - (b) Naval bearings
    - (c) Surveyors' bearings
  - (4) Use of vectors
    - (a) Using a line segment to represent by its length and direction a velocity or the amount and direction of a force
    - (b) Using vectors to solve problems
      - Finding the resultant of two forces.
      - Finding heading and correction angle given course, air speed, and wind velocity
      - Finding heading, given course, speed, and current
      - Finding wind velocity, given heading, ground speed, and drift angle
  - (5) Representation of front, top, and side views of simple objects.
- b. Numerical trigonometry of the right triangle
- (1) Development by a scale drawing of the tangent function for angles of  $10^\circ$ ,  $20^\circ$ ,  $30^\circ$ , . . .  $70^\circ$
  - (2) Use of 3- or 4-place tables of tangents to solve right triangles given two legs, or a leg and an acute angle
  - (3) Development of sine and cosine functions by scale drawing for angles of  $10^\circ$ ,  $20^\circ$ ,  $30^\circ$ , . . .  $80^\circ$

- (4) Use of 3- or 4-place tables of sines and cosines to solve triangles given hypotenuse and side, or hypotenuse and acute angle

### *Algebra*

The main use of algebra is made in connection with literal notation, particularly in formulas and equations. Many topics generally taught in the sequential courses need not be taught in this special course. In particular the following topics should be omitted. Addition, subtraction, multiplication, and division of polynomials; special products; factoring, except the case of removing a common monomial factor; algebraic solution of simultaneous equations; quadratic equations, except the form  $ax^2 = k$ ; and so-called verbal problems. The level of difficulty of no topic should be greater than that required in commonly used formulas. This means that all topics should be held to the simplest examples.

A brief outline follows:

1. Symbolism
  - a. Letters as symbols for numbers
  - b. Symbols of operation including exponents, radical signs, and parentheses
2. Formulas
  - a. Meaning
  - b. Evaluating formulas concerned with shop, industry, and the armed forces including aviation. (This requires only a knowledge of the meaning of symbolism and skill in arithmetic.)
3. Equations
  - a. Simple types such as  $3n = 6$ ,  $n+3 = 6$ ,  $n-3 = 6$ ,  $\frac{n}{3} = 6$ ,  $2n+3 = 7$ , and  $2n-3 = 7$
  - b. Indirect use of the formula (substitution of given values and solution of resulting equation for the unknown)
4. Signed numbers
  - a. Meaning and use
  - b. Fundamental operations
  - c. Equations which can be reduced to the form  $ax+b = cx+d$  including those having a single parenthesis
5. Graphs
  - a. Familiarity with the co-ordinate system
  - b. Interpretation of many kinds of simple graphs
  - c. Graphing linear formulas
  - d. Solution of simultaneous equations (The intersection of two lines frequently furnishes the solution of problems in navigation.)
6. Operations (only the simplest examples)
  - a. Combining like terms
  - b. Laws of positive integral exponents
  - c. Removing parentheses



- d. Multiplying a polynomial by a monomial
- e. Division by a monomial
- f. Factoring (one case, taking out a common monomial factor)
- g. Algebraic fractions. (No more difficult operations with fractions or fractional equations need be taught than those that are necessary for evaluating formulas that are commonly used in every-day life)
- h. Ratio and proportion
- i. Radicals
  - (1) Square root by computation
  - (2) Square root by tables (interpolation)
  - (3) Simplifying radicals only as needed in using the tables
  - (4) Use in formulas
- j. Quadratic equations of the form  $ax^2 = k$ .

In the use of notation recognition should be given to the fact that many practical formulas make use of both capital and small letters and letters with subscripts, and superscripts. In substitutions both common and decimal fractions as well as integers should be used. In equations both common and decimal fractions should occur as coefficients.

#### SPECIAL ONE-SEMESTER COURSE

This course is an emergency refresher course for high-school pupils who are near graduation or induction but who are not at present studying mathematics. It should be realized that mathematical knowledge which the pupils do not possess cannot be refreshed. Hence, the material used in this course will depend on the previous training or lack of training of the pupils. For everyone it will contain the fundamentals of arithmetic after diagnostic tests have determined the needs of the pupils. For some, those with little or no mathematical background, this arithmetic plus certain essential topics from general mathematics such as scale drawing, including elements of blueprint reading, numerical trigonometry, informal geometry, and simple formulas and equations, will constitute the course that will be given in this one-semester course.

For pupils who have had previous courses in algebra and geometry the refresher course should emphasize those aspects of mathematics that are particularly applicable and essential to the war effort. It should begin with the fundamentals of arithmetic. The review of algebra and geometry should reduce emphasis on operations with polynomials (eliminating long division completely).

The following should also be eliminated:

Special products and factoring (except monomial factors, and possibly the difference of two squares and the perfect trinomial square)

Fractions with other than monomial denominators

Complex fractions (the type of fraction retained should be that found in formulas in geometry, physics, and simple shop situations)

Equations containing artificial fractions

Complex work in radicals (the types of radicals retained should be those occurring in geometry, numerical trigonometry, and physics)

Quadratic equations (except those of the type  $ax^2=k$ )

Deductive logic in the establishment of geometric relations.

In the small high school it may be necessary to teach pupils of varying backgrounds in the same classes. In the larger high school at least two situations should be recognized:

1. A course for those pupils who have had no high-school mathematics or only a one-year course in general mathematics or algebra. This should contain, in addition to the first topic below, as many of the other topics as can be done effectively.

- (a) Fundamentals of arithmetic to correct deficiencies discovered by diagnostic tests.
- (b) Topics from general mathematics including scale drawing leading to the elements of blueprint reading; numerical trigonometry and uses of the Pythagorean theorem; informal geometry including constructions, congruence, and similarity; and uses of tables.
- (c) Many practical applications from aeronautics, navigation, and shop uses of mathematics.<sup>2</sup>

2. A course for those who have had two years of mathematics. This should contain as many of the following topics as can be done well:

- (a) Fundamentals of arithmetic to correct deficiencies discovered by diagnostic tests
- (b) Review of previous courses in mathematics omitting deductive derivation of geometric theorems and many of the purely manipulative and highly complicated expressions in algebra as indicated previously
- (c) Many applications from aeronautics, navigation, artillery fire, parallelogram of forces and triangle of velocities, shop uses of mathematics; and use of tables and the slide rule.

#### SEQUENTIAL COURSES

The sequential work includes four years of mathematics beyond the eighth grade (seventh grade in states with a seven-grade elementary school) and should include solid geometry and trigonometry. Schools which find it possible may offer for the more interested and capable of these pupils additional work in mathematical analysis including topics selected from advanced algebra, spherical trigonometry, and the elements of analytical geometry and the calculus.

<sup>2</sup>A fertile source of both war-time and industrial applications is the Seventeenth Yearbook of The National Council of Teachers of Mathematics, *A Source Book of Mathematical Applications*. Bureau of Publications, Teachers College, Columbia University, New York, 1943. Price, \$2.

Each year of the course should contain some work in the fundamentals of arithmetic to insure increasing speed and accuracy in computation. Even competent pupils enrolled in the sequential courses do not always have adequate skill in applying fundamentals to whole numbers, fractions, decimals, and per cents. In many schools the courses in algebra and geometry fail to maintain arithmetic skills. This work should not be aimless but should be skillfully selected practice to correct deficiencies made evident through diagnostic tests. This work in arithmetic has already been outlined in connection with the special one-year course.

Many practical applications from physics, shop and industry, engineering (including use of the slide rule), navigation, artillery fire, and the parallelogram of forces including the triangle of velocities should be introduced. In selecting the applications there is need to guard against choosing those in which the technicalities are too great. A selected bibliography of such material is given at the end of this report.

Modifications in content to permit of more careful teaching and of the introduction of practical applications are possible. If an attempt is made to cover too much material, pupils will not receive sufficient practice to secure reasonable mastery of the subject.

Suggestions for modification follow:

*Algebra.* Reduce the amount of time spent on special products and factoring, on complex fractions, on fractions with other than monomial denominators, on equations containing such fractions, and on complex work in radicals.

Increase the amount of time spent on fundamentals of arithmetic, numerical trigonometry, on the use of practical formulas in industry, aeronautics, and science, and in the solution of practical problems in those branches.

*Plane Geometry.* The objectives of a course in plane geometry should be to acquaint the pupil with geometric facts and their application, and to give him an appreciation of postulational thinking. It is not necessary to demonstrate all of the propositions in a deductive course. Some can be treated informally. By wise selection of theorems to be proved, time will be provided for the fundamentals of arithmetic and for continued use of algebra as well as for such practical problems as: "Doubling the angle on the bow" and "bow and beam sailing," radius of action problems, the parallelogram of forces and the triangle of velocities, numerical trigonometry, the extension of locus to include the derivation of the equations for the circle, parabola, ellipse, and hyperbola, the law of sines and cosines, and the use of the transit and other instruments.

*Plane Trigonometry.* Omissions may be made in the development of trigonometric analysis including the proof of general trigonometric identities and the solution of trigonometric equations. Pupils definitely pointed toward

higher mathematics will, however, need some work with equations and identities.

*Solid Geometry.* The proofs of formulas for surfaces and volumes can be treated informally. Deduction should be limited to the relations between lines and planes in space and to figures drawn on the sphere. Theorems about the intersection of two planes and all of those theorems about perpendicular lines and planes and parallel lines and planes are particularly important for an understanding of three-dimensional space. Relations of figures on a sphere lead directly to terrestrial geometry and should be emphasized. Small circles and great circles should be connected with circles of latitude and meridians of longitude on the earth's surface and with great circle sailing.<sup>3</sup>

Time thus saved in both trigonometry and solid geometry can profitably be spent on improving skills in computation, on practical applications including the use of the slide rule, elements of navigation, or on mathematical analysis including topics from analytic geometry, the calculus, or advanced algebra. These topics, however, should not be introduced to the detriment of a clear understanding of elementary work.

#### SUGGESTIONS TO TEACHERS

Teachers of mathematics whose academic and professional training has been adequate will need further training to carry out the recommendations in this report as follows:

1. Study of war-time and industrial applications of the fundamental ideas of mathematics
2. Further training in science in order to correlate mathematics properly with science
3. Refresher courses in colleges and universities when necessary

Teachers in other fields who will be inducted into the teaching of mathematics because of the emergency, and there may be a considerable number of them, should in every way seek to prepare themselves to do as acceptable work as possible. Those who have little or no knowledge of what they are to teach cannot expect to be successful. The main methods for improvement consist of:

1. Attendance at summer schools and in part-time courses especially planned to meet their needs. Such courses should include: professionalized subject matter in the content material which they have to teach
2. Departmental meetings where problems of the emergency should be discussed (in the larger city school systems experienced teachers of

<sup>3</sup>It is interesting to note that this recommendation concerning solid geometry is supported by a recent statement of the College Entrance Examination Board with respect to its new Comprehensive Mathematics Test. "This examination will test the candidates' knowledge of algebra through progressions, plane geometry, trigonometry, and logarithms, and intuitive [informal] and computational solid geometry. It is designed for students who wish to enter courses in engineering or other sciences, which have mathematics as a prerequisite. Candidates for this examination will normally have had four years of mathematics beyond the eighth grade."

the departments of mathematics should feel obligated to give as much help as possible to the less experienced ones)

3. Studying the content of elementary mathematics
4. Studying the best literature on the teaching of mathematics. A short selected bibliography is given which should be helpful to those who need it
5. The teacher of physics and chemistry will be able to suggest the types of formulas and equations used in applied science
6. In the larger school systems having vocational schools or departments, the instructors in trade and industrial education can be of a great deal of assistance to the inexperienced teacher by suggesting industrial applications of mathematics.

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The following bibliography is not intended to be exhaustive but suggestive of practical applications that may be helpful to teachers of mathematics and science. It includes only the more elementary works. Some examples and some of the developmental material in many of these books are open to criticism, but thoughtful selection will yield a large amount of helpful material. For obvious reasons no attempt was made to list all of the useful textbooks.

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## Never Again<sup>1</sup>

JAY B. NASH

*President of the American Association for Health, Physical Education, and Recreation and Professor of Education, New York University*

NEVER AGAIN must we be caught, "in the bleachers with our fur coats on," by a seasoned team, trained in the techniques to win a victory at any price. We had complete confidence that we would never again have to call upon our bodies to do exacting, grilling tasks. The nation as a whole had settled back in its well-gasolined car and its comfortably cushioned chair by the radio. It was a rude awakening but thanks to five thousand miles of water, we have a second chance.

Potentially, man for man, young and old, we enjoyed a higher level of health than any other nation in the world but we lacked training, and still do. We were living on the "frosting of the land"—too much actual sweets in our diet, too much refined cereal, too little exercise of the rugged and vigorous type. We were counting on too many "drug store short cuts" to health.

Unpublished reports from army and navy training centers state that over seventy per cent of our armed force trainees were unsatisfactory from the standpoint of physical fitness on the basis of lenient standards. Beginning around the age of nineteen or twenty the decrease in efficiency is very sharp. This is in the face of the fact that the decade between the ages of twenty and thirty should represent man's peak of efficiency—physically and intellectually.

### WEAKNESSES ARE SHOWING UP

This lack of vigorous training is shown in weaknesses of the shoulder girdle, arm and back muscles. These were the muscles of the pioneers—the muscles which helped to conquer the wilderness—they swung the ax; they lifted; they pulled, and yet today a large percentage of our young people cannot chin themselves three times and twenty per cent, from certain cross-sections of our city youth, cannot even do it once. Our youth lack heart power for endurance and today the man who has endurance is the victor. We need endurance for the long march, for standing on watch, for the long periods of flight in the fighter or bomber before we reach our objectives. Endurance is built in running and we have been sitting.

These lacks are showing up also in our factories and in our shops. In many areas, one man out of ten is absent every day. It is the AWOL of industry about which Captain Rickenbacker is talking which represents our most dangerous losses. It is one man of a football team, trying to win the game—it is one man out of the basketball team for one entire half. Teams cannot win

<sup>1</sup>A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

games under these conditions. This absenteeism represents approximately a million and a half men working a year. If this could be cut down even ten per cent, and it could if men kept themselves in good condition, the Surgeon General insists that with the additional labor provided, we could build twelve cantonments of average size, or five battleships or 16,407 combat tanks.

Teaching classroom health for hygiene is not enough. This provides information, but information is valueless unless used and even wholesome health habits fall short unless power is built through physical exercise—the exercise which is the heart of the physical education program. An editorial in the *Journal of the American Medical Association* well states this:

This may be considered as corroborative of the well-known fact that physical training for any particular activity increases the ease with which that activity is done and decreases the likelihood of fatigue. Physical training may reduce liability to fatigue to such an extent that hours of work can actually be increased with safety.

Military drill is not enough, even at its best, and today it is impossible to furnish a proper drill master and a staff of assistants. A government publication warns: "Improperly directed and conducted drills are not only a waste of time but fix undesirable habits and attitudes in the student."

The new manual on *Physical Fitness Through Physical Education*, sponsored as part of the High School Victory Corps by the U. S. Office of Education, in co-operation with experts from the army, navy, and schools and colleges of the country, recommends the essential first steps—time in which to build power.

In general, the activity program should provide at least one regular school period daily of instruction in physical education for all pupils. The instructional period should be supplemented by an elaborate participation program including intramural and interscholastic athletics, and other vigorous activities.

#### POWER BUILDING IN THE BODY RECOGNIZES SHORT CUTS

Outside of the required hour each day, provision should be made for two additional hours. This time might be picked up in many ways—some schools are lengthening the day, walking to and from school has advantages, work experiences in cities, villages, and farms, especially such experiences as involved in running, walking, and bicycle riding, are all valuable. The summer vacation periods must be utilized. Good vigorous work on the farm has real advantages and work experiences for city children must be provided for on some nation-wide plan. These work experiences lay not only the basis for physical fitness but for citizenship and character development and fit into the High School Victory Corps program.

Beyond the strengths, skills, and endurances, the armed forces and the communities are calling for men drilled in teamwork. We win or lose as a



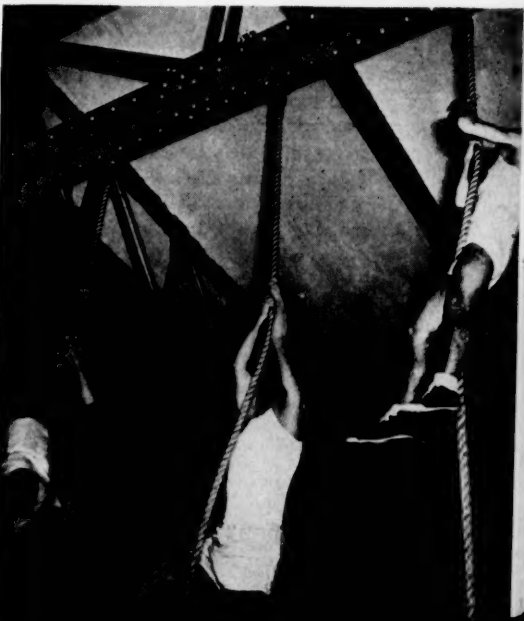
team, not as individuals. Certain specially trained troops, particularly the *commandos*, must learn every technique of self-preservation in hand-to-hand combat. We are fighting a ruthless enemy, particularly the enemy on the West. It is rather generally recognized that these techniques of "dirty fighting" must be a part of the special training of these *commando troops*. This does not mean that such techniques will be tolerated as a part of our education in a democracy. We must not jeopardize the principles of democracy for dozens of generations, merely for a temporary gain; rather, the ringing words of General MacArthur should be our guide—"On the fields of friendly strife are sown the seeds which in other years on other fields will bear the fruits of victory."

School board members and administrators must also keep in mind the *laws of normal risk*. This training program is going to involve risk; likewise, the training of thousands of pilots involves risks—war involves risks. But without this training, there are more risks. We risk everything, and, if we lose, the yoke is on our neck for a thousand years.

School administrators and board members have been prone to step down the physical education program to the weak and the infirm to avoid risk because of the possibilities of damage suits. Now is the time to fight unscrupulous lawyers and oftentimes unscrupulous parents. The laws on our statute books assume normal risks where the outcome is for the good of the masses and the desire of the nation today is to support a courageous program against these undermining forces.

The High School Victory Corps Manual, while stressing the necessity for periodic medical examinations, adequate nutrition, safety education, and a knowledge of hygiene, calls particularly for a program which will develop *aggressiveness, strength, endurance, and muscular co-ordination*. It calls for: "Formal calisthenics and body-building exercises; running, jumping, climbing, tumbling, wrestling; competitive team sports and games requiring bodily contact, marching, hiking,

Students of the Montclair, New Jersey, High School toughen up for victory in physical education classes. Boys climb 18-foot ropes, learn how to meet physical obstacles, and develop stamina and endurance.



swimming, rhythmic dancing. Every high-school boy and girl should participate in the program of physical activities appropriate to his or her abilities and needs."

#### CONDITIONING EXERCISES NEEDED

It should be noted particularly that this program is not one of rigid calisthenics on the one hand or one of "dog eat dog" competition on the other side. We need conditioning exercises and vigorous competition for all.

Conditioning exercises are needed for warming-up purposes, for increasing flexibility, for preparing the body to enter safely into strenuous athletic contests. Conditioning exercises are needed for strengthening of certain muscle groups particularly those of the upper arm, back, shoulder, and abdomen. These strengths are essential in carrying packs on maneuvers and on board ships, for lifting, climbing, and also in acquiring power to resist fatigue in planes, tanks, on the march, or on the watch. These essential qualities do not result from many of our athletic programs. Conditioning exercises through which power may be built, include among others pushing and pulling, lifting and carrying activities, rope, ladder and wall climbing, tumbling and pyramid building, hand-to-hand contests, some of the formal calisthenics and gymnastics, as well as ranger and *commando* activities.

There is general agreement among physical education leaders that mere muscle strength is not enough. Endurance—"heart power" best acquired in running—agility, and teamwork must be developed. The activities which can foster these qualities best are: swimming, running as such, or running as is involved in sports. The qualities of teamwork recognized by all as a "must" are best, if not only, acquired in sport activities. Therefore, athletics of the large team or dual type become a "must" in any well-rounded program.

Beyond these strengths, endurances and even beyond teamwork, there must be a will to win. Effort and interest must be raised to the highest level of performance. Competition in many types of activities is at least one successful method of raising effort to the "psychological" level, where men can perform the seemingly impossible tasks.

Physical education refuses to have a wedge driven into its ranks in an attempt to divide the professional workers into sponsors for conditioning exercises and sponsors for athletics. We will not be caught on the horns of this dilemma where either choice is impossible and unscientific. We insist on the "some of both" for everyone and in general this applies also to girls, although this statement is made with particular reference to men.

We insist upon this well-rounded program, all phases of which can be made competitive, to develop men with endurance who are organically strong, skillfully alert, highly co-operative, and emotionally aroused to meet the enemy, man to man, anywhere, on land, sea, or in the air—and win.

## War-Time Service and the Junior High School\*

LIEUTENANT EDWIN D. MARTIN

*Air Corps, United States Army, on leave from Principalship of Alexander Hamilton Junior High School, Houston, Texas*

PHYSICAL-FITNESS clubs have pervaded our high schools both junior and senior. Producing healthy bodies is one of the services junior high schools must render. To be sure this service is necessary in peacetime as well as in wartime. We are finding out in this war that many young men are being turned down by the Selective Service because they are not physically fit. This same condition existed twenty-five years ago. Had a nation-wide program of physical fitness been started immediately following the First World War, we would not have so many young men unfit to serve their country in this crisis.

### THE HEALTH OF THE PUPILS

It is therefore necessary that we turn our attention to developing strong bodies in our high schools. Such a program must be a sensible one. It must be suited to the age of the pupil. The program must, however, be carried on with regularity under competent supervision. Physical fitness for victory clubs have been organized in many junior high schools throughout the country. Such a program, also, must have variety and must be designed to toughen and build bodies, not to tear down. Many schools have patterned their program after the navy's physical-fitness program, or after that of the army. It must be remembered that the age of the pupil is to be considered in any program that is designed to build strong bodies. The aim of every junior high school should be to have all of its pupils physically fit when they go to the senior high school.

### WAR-TIME ATTITUDES OF PUPILS

Another war-time aim of the junior high school is the proper attitudes of the pupils during wartime. These pupils are emotionally upset. Many of these pupils have older brothers and sisters in the service, and some have fathers and mothers serving in the armed services. There are others whose parents are working in war industries. The junior high-school pupil is more easily upset emotionally than either the elementary or the senior high-school pupil. It is necessary that proper attitudes be maintained. The junior high school is not the place to teach hatreds of other peoples. We do not want an "education for death" in this great democracy. I know of one junior

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\*A copy of the address that the author had prepared to give at the annual convention of the *National Association of Secondary-School Principals* at St. Louis, Missouri. Since the convention was cancelled at the recommendation of the Office of Defense Transportation, the author has kindly consented to make it available to the Association for publication.

high school that is training the boys in the art of throwing hand grenades in its physical-fitness program. This may be splendid training for physical development of these junior high-school pupils, but concomitant hatreds may result from such training.

Proper attitudes during wartime may be achieved through sensible discussions and through open forums. If you have not tried open forums in your junior high school, you have a pleasant surprise awaiting you. Organize one in connection with your Parent-Teacher Association and hold an occasional open house in your community. Participation in musical organizations provides an excellent opportunity for junior high pupils to become emotionally stable during wartime. Bands, orchestras, and choral singing will do much to build up morale in your junior high school. The army uses music to build and hold morale. It is marvelous what a band can do at an army post, and it will do the same for your junior high school. If you do not have a band, then have group singing. Proper attitudes and morale go hand in hand.

#### ACADEMIC PREPARATION OF PUPILS

Another service of the junior high school in wartime is the academic preparation that it must give the pupils. It is more necessary than ever that pupils know well the fundamental processes of learning. English must be thoroughly learned. World history has become a necessity. World geography is needed as badly as a road map used to be. Science and mathematics are used more in this war than other subjects. One of the great services that junior high schools can render is to do a better job teaching these fundamental subjects than was done before. Not many junior high-school pupils will be inducted before entering the senior high school, but there will be a few pupils in the junior high school who will need pre-induction training. If the junior high school is not equipped to handle this program, the senior high school should give this training for the few junior high-school pupils involved. The junior high school can and should stress the study of languages for boys who are soon to be called into the service. Academic preparation on the part of the pupils in the junior high school needs to be thorough in all its work.

#### WAR-TIME OR WORK-EXPERIENCE ACTIVITIES

A fourth war-time service of the junior high school is that of its activities. A better and more recent name for such activities is work experience in education. Many of these activities and experiences are applicable in peacetime as well as in wartime. I shall give below some of the "work experiences" offered pupils at the Alexander Hamilton Junior High School, Houston, where I was principal prior to my being called to active duty with the Army Air Corps. In this school these activities or "work experiences" are offered during the school day at the club period as electives.

*Alexander Hamilton Junior High School Activities*

*Drawing and Painting.* This club includes sketching things in which pupils are interested and making posters for the school. Each year it submits posters to the "National Humane Poster Contest."

*Girls Sewing Club.* The purpose of this club is to keep school clothes mended, to let down hems, to sew on buttons, and to learn to patch tears and darn socks.

*Airplane and Ship Modeling.* These model ships are furnished the army air corps. I can assure you that these models are used in the ground schools of the air corps in teaching cadets ship recognition.

*Student Council.* This club is a cross section of the student body by home-rooms and is truly democracy at work.

*First Aid.* This timely club follows the Red Cross instructions.

*Traffic Safety Club.* This club is composed of a group of boys who work with the police in directing traffic in front of the school before and after school.

*Honor Society.* This school has a chapter of the National Junior Honor Society. The chapter selected Red Cross work this year as a special project.

*James S. Deady Junior High School Activities*

*Respect for the Flag.* Each morning when the tardy bell rings each pupil and teacher stands, repeats the pledge of allegiance, and salutes the flag. During this ceremony the flag corps raises the flag while the bugle corps sounds "To the Colors."

*Air-raid Program.* This school has a well-organized air-raid program (All the Houston junior high schools have similar programs). Each classroom has two pupil air-raid wardens who have proper instructions for conducting practice air raids. Air-raid shelters have been designated and are used in the drills. (Houston is in the dim-out area and these air-raid drills are real to these pupils).

*Visual Education.* Deady Junior High School is co-operating with the government in showing free government films on war information to the pupils. Other junior high schools are using this service.

*Radio Programs.* Suitable radio programs are used in the classrooms. Each pupil heard President Roosevelt's recent message to Congress on the state of the nation.

## OTHER ACTIVITIES OF HOUSTON'S SCHOOLS

Houston, the largest city in Texas, has completed one war-time service in all the schools that is far-reaching. Each of the seventy thousand pupils has been fingerprinted by the Parent-Teacher Association through the co-opera-

tion of the Office of Civilian Defense. This service may prove invaluable in case of air raids which we trust will never come.

The sale of war bonds is another war-time service in which all schools can participate. War stamps should be on sale at the school each day. It is this opportunity to buy stamps regularly that encourages thrift among pupils. Students at Hamilton Junior High School purchased over \$10,500 worth of war bonds and stamps from September through December of this school year.

All the junior high schools of Houston are rendering war-time service. The same may be said of junior high schools throughout the nation. I would like to mention some war-time service of some other junior high schools in Houston which are commendable:

Lanier Junior High School pupils have purchased over \$40,000 worth of war bonds and stamps this school year.

Edison Junior High School in co-operation with Franklin Elementary School collected seventy-five tons of scrap metal during the scrap drive.

Stonewall Jackson Junior High School is said to have one of the best air-raid programs in the state.

John Marshall Junior High School has a "Scrappers Club" that has a permanent program for the collection of scrap metal.

The entire faculty of the Alexander Hamilton Junior High School (forty members) completed the Standard Red Cross First Aid course last spring. Approximately one-half of the faculty completed the advanced course.

War-time service in the junior high school includes such services as have been discussed in this paper; namely, health of the pupils, war-time attitudes of the pupils, academic preparation, and war-time activities or "work experiences" for the pupils.

### MY PART IN THIS WAR

#### Helping on the Home Front

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The basic story of the struggle for economic stabilization and an efficient war program.  
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## News Notes

**NEA CANCELS SUMMER CONVENTION**—"The Executive Committee of the National Education Association, being fully conscious of our country's problem of transportation during this critical war period and being desirous of co-operating in every way with our government, has cancelled the regular summer convention of the Association which is usually attended by many thousands of teachers," it was announced by A. C. Flora, President of the National Education Association and Superintendent of Schools, Columbia, South Carolina. As it is necessary for the Association to organize for the greatest possible service in the war effort and to plan ways in which education can best contribute to the peace that follows, a meeting of the Representative Assembly will be held at Indianapolis the latter part of June. At this meeting, the regular business of the Association will also be transacted.

**MY DESIRE FOR LIFE**—The following interesting statement was written one evening before induction into the United States Army by Private Joe O. Bumpus, Hq. & Hq. Co., Reception Center, Fort Sill, Okla. Before induction Mr. Bumpus, was principal of Chandler, Okla., High School.

To accomplish all I set out to do—to help others at all times.

To have a genuine peace of soul—respect of fellowmen—and lastly sensitive to all of the beauties of creation.

To have faith—to love and be loved—the comradeship of a kindred heart.

To always be worthy of the blessings of life and to be forgiven for all of my mistakes.

To plunge in and help the man that's down—be true to all convictions.

To understand and care for people.

To have a faith in a Higher Being—to live afar off—not in a conformed world but in seeking the fullest development, apart from a single creed, for the full measure of life and satisfaction.

This then would be my plan of life—to write a little, read much, serve willingly, be fair in all things, think, and live nobly.

To find the purpose of my life and serve and serve until the last spark of life has smouldered away.

To have realized then a full life thus gaining the peace that passeth understanding.

To not worry about the world beyond—just do my best and no man can do any more.

To really live—This is my prayer.—Copyrighted, 1942.

**FARM LABOR CAMPAIGN**—The United States Department of Agriculture, the War Manpower Commission, the Office of Civilian Defense, and the Office of War Information are joining forces in launching a vigorous campaign to promote the recruitment of farm labor and food processing labor for peak season needs. Upon the success of this campaign will depend in large measure the attainment of food production goals for 1943. These goals which are considerably higher than those attained in 1942 (a record high for all time) must be reached, if we are to carry out the four-fold war-time task of supplying necessary food to our armed forces, (2) to our civilian workers, (3) to our United Nations Allies, and (4) to the occupied countries as they are liberated by the United Nations. It is necessary to undertake the recruitment of seasonal workers at once in order that assurances may be given farmers and food processors that sufficient manpower will be available when the foods have to be harvested and processed. Farmers cannot be ex-



pected to make the extensive plantings required by this year's food goals unless they have such assurances in advance.

For this reason, high schools and colleges throughout the nation as well as local Defense Councils will begin at once a drive to replace the farm help which is being siphoned off by the draft and the high-wage paying defense industries. The Office of Education and the Department of Agriculture are organizing "Victory Farm Volunteers" in the schools. These volunteers will be a component part of the "U. S. Crop Corps" which the War Manpower Commission and the Department of Agriculture are setting up throughout the nation.

Here are the facts bearing upon the need for the farm labor recruitment campaign. From the Fall of 1941 to the Fall of 1942 more than one million six hundred thousand full-time workers left the farm. Many of these are being replaced, but largely by older men, by women, and by youths, all relatively inexperienced. If present trends continue, agriculture will lose a million and a half more workers in 1943. Normally, from two to four million extras are needed to meet peak season needs on our farms. This year a much larger number will be necessary because the migrant workers who would ordinarily follow the crops are being drawn into the factories and the armed forces and because many of the peak season workers who will do farm work for the first time will work for only a short period. Furthermore, production goals have been greatly increased and transportation difficulties will prevent the migration of workers from one part of the country to the other. It is expected that by the end of 1943 we will have about 10 million men in the armed forces and it will require nearly 41 million pounds of food per day for them.

Men, women, or youths who volunteer for service in the "U. S. Crop Corps" will be given appropriate insignia. The insignia consists of a blue "C" with its inside edge toothed like a cog wheel. Inside of the "C" is a red sheaf of wheat superimposed upon the letters "U.S." The sheaf of wheat symbolizes food production and the toothed edge of the "C" symbolizes food processing.

The goals for some of the principal products for 1943 are as follows:

Product	Goal	Percentage Increase or Decrease
Milk (pounds) .....	122,000,000 .....	2%
Milk cows .....	25,720,000 .....	2
Eggs (dozen) .....	4,344,704,000 .....	2
Corn (acres) .....	95,000,000 .....	4
Oats (acres) .....	37,300,000 .....	-4
Tame Hay (acres) .....	59,000,000 .....	-2
Peanuts, for all purposes (acres) .....	5,500,000 .....	7
Soybeans for beans (acres) .....	10,500,000 .....	-17
Long-staple upland cotton (acres) .....	1,844,000 .....	15
Wheat .....	52,500,000 .....	2
Flue-cured tobacco (acres) .....	841,167 .....	5.6

EDUCATION FOR CITIZENSHIP IN AXIS COUNTRIES—The Michigan study of the Secondary-School Principals has through a group of teachers and students in a 1942 Senior Workshop prepared a dramatization on the subject, **Education for Citizenship in Axis Countries**. The script as the title indicates shows what the Axis countries do by way of indoctrination to develop their totalitarian states where everyone is compelled to submit to the development of the State, where an individual's worth is measured in terms of his obedience to the demands of the State. The group is now hoping that some group will

attempt to prepare a script which dramatizes education for citizenship in a democracy as a reply to the challenge of this script.

**NAVAL AVIATION ENLISTMENTS FOR HIGH-SCHOOL SENIORS**—Opportunity has now been granted to a limited number of high-school seniors to enlist in Naval Aviation and to win the Navy Wings of Gold as well as a commission in the Naval Reserve or the Marine Corps Reserve. Applicants must be seventeen year of age, physically fit, and will be required to finish their high-school courses and be graduated by June 30, 1943. Then successful applicants will be ordered to active duty with pay and may be sent into Navy Flight Preparatory Schools or into a new college program. Following their ground school and flight training, successful aviation cadets will be commissioned ensigns in the U. S. Naval Reserve or 2nd Lieutenants in the U. S. Marine Corps Reserve with the title of Naval Aviator and the full pay and allowances of those ranks. The Naval Aviation Cadet Selection Board, which is in charge of the program for a local area, will make every effort to inform each high school of the requirements of the new program. Traveling parties from the Board will be sent into many areas and every high-school principal or military advisor should endeavor to attend one of their meetings.—**News of the Week.**

**PLANNING FOR THE POST-WAR WORLD**—Post-war planning for the world in general and for America in particular is the knotty problem tackled by **Building America** in its current issue, "Planning for the Post-War World." The most important plans so far suggested for post-war living are summarized; conflicting points of view on the leading issues are briefly but fairly reviewed; difficult and often complex questions that must be solved—such as those dealing with colonies, trade, taxes, boundaries, etc.—are clearly stated. The Atlantic Charter, the United Nations Declaration, Lend-Lease, and their relation to global peace as well as to global war are discussed. In short, this issue provides the needed background for an intelligent understanding of what post-war planning really involves. It does not attempt to blueprint the future, but it does give the reader essential information upon which to base his own thinking about it. While this particular subject might seem a difficult one to illustrate, the editors have succeeded admirably in assembling pictures, maps, charts, and cartoons that lend graphic interest to the text and make it easy to visualize and remember important points. For the general reader, or for use in high school and college classrooms this 32-page study should prove a most valuable guide to clear thinking about the whole intricate subject of post-war planning. Individual copies may be obtained at 30 cents each from **Building America**, 2 West 45th Street, New York, N. Y.

**HEALTHFUL LIVING IN A DEMOCRACY**—A recent article in the February 1943 issue, pp. 210-16, of **Educational Method**, by Rose Lammel of Ohio State University outlines and discusses the need for building new understandings for healthful living in a democracy. This article makes the following statements. "Any school that is taking seriously its responsibilities for furthering the democratic way of life has real cause these days to reconsider its health program. It is imperative for the schools to become clear and aggressive concerning the implications of the democratic way of life for the development of physical-emotional-intellectual fitness of the young boys and girls who are maturing from babyhood to childhood to adulthood in our classrooms, shops, and studios." The author then lists and elaborates upon the characteristics of an individual growing toward optimum health. These are:

1. The individual is gradually achieving a consistent and unified outlook on life.
2. The individual's evident vigor and tone imply reserves of energy and power of initiative.
3. His bodily parts function with harmonious integration and optimum efficiency in energy transformations.

4. The individual has a sense of achievement.
5. He is gradually achieving status as a person through growth in independence, in establishing security, and in developing a sense of belonging.
6. He is gradually freeing himself from childish egoism, and evidences growth in social sensitivity and willingness to sublimate personal desires for the larger concerns of the groups to which he belongs.
7. He understands the wide range of variability that can exist within the concept of normality, and in so doing he is becoming more able to accept and to live more intelligently with his own personal variations.
8. He understands his sex role.
9. He has status in family relationships.
10. He has status in the various groups and with his age mates of both sexes through his effective participation in several functional groups.
11. He is frank, communicative, and sociable, and he enters heartily and with enjoyment into the spirit of social intercourse.
12. He is considerate and helpful and is growing in his concerns for other people, their plans, their successes, and failures.
13. He is growing into a satisfactory heterosexual adjustment.
14. The individual has a zeal for promoting more healthful living through social reconstruction.
15. He is achieving status in society through increasing economic independence and through social competence.
16. He is achieving status in society as a contributor to the furthering of more democratic ways of life within the social order.
17. He participates effectively in social institutions.

#### A UNIVERSITY COURSE IN JOURNALISM FOR HIGH-SCHOOL STUDENTS—

The Thirteenth Annual National Institute for High-School Journalists will again be sponsored by the Medill School of Journalism at Northwestern University, Evanston, Illinois. This Institute will be in session for four weeks, from June 21 to July 18, 1943. The enrollment is limited to seventy-five high-school juniors and seniors who expect to be graduated in June of 1943 or 1944, who have good grades, who have shown special interest and ability in the field of high-school journalism, and who meet the standards of admission set by the Institute. Last year thirty-two states were represented in the membership of this class. The Institute provides an unusual opportunity for talented and ambitious pupils to work under a university faculty, in a university atmosphere, with all the extensive facilities of a large university. Pupils who have attended the previous twelve summer sessions have found the course to be extremely helpful to them in their work. They have likewise found this an excellent opportunity to become acquainted with pupils of like interests living in all parts of the country. Applications for admission to the Institute will be accepted until May, 1943. A limited number of half-tuition scholarships is available to those who meet certain requirements. Any pupil that is interested in attending this Institute should make early application due to the fact that the Institute receives applications from almost a thousand pupils from which only seventy-five can be selected. For additional information about the four-week session as well as for application blanks, write to Professor Floyd G. Arpan, Medill School of Journalism, Northwestern University, Evanston, Illinois.

**THE VICTORY HOUR FOR THE VICTORY CORPS**—The Victory Hour, official radio program of the High School Victory Corps, began a new series of programs (2:30-3:00 p.m. EWT) over more than 100 Blue Network stations. The subjects scheduled are: March 30—Victory Farm Volunteers—High School students help solve the farm labor shortage, April 6—Army Day, April 13—Jefferson Gave Us Our War Aims—What are we fighting for? April 20—What Can a High School Student Do This Summer? April 27

—Youth Under Fire—The story of young people who fight the Axis in other United Nations, May 4—Precision Wins Wars—Mathematics and Science join the Armed Forces, May 11—Learning to Live with Less—Or how to beat inflation, May 18—Planning Your Career in the Army or Navy, May 25—Winning the Peace, and June 1—Our Seven-Ocean Navy. This fast moving, stirring program tells students just how they can prepare themselves for important war service. Each broadcast will feature (1) News of what other high-school students are doing in the war effort; (2) On-the-job interviews with soldiers, sailors, and other war workers who tell what they are doing and explain what kind of training war jobs require; (3) Special messages to students by directors of national war agencies; (4) Pick-ups from England and other United Nations countries; (5) Review of the week's news by a leading commentator; and (6) Music by the service bands.

**COLLEGE SCHOLARSHIPS FOR SECONDARY-SCHOOL STUDENTS.**—Twenty-four new national honor-entrance scholarships to the College of the University of Chicago will be awarded to secondary-school sophomores and juniors, President Robert M. Hutchins of the University has announced. The scholarships will be awarded on a nation-wide basis to boys and girls outside the Chicago area. The College begins at the level of the junior year in the secondary school and ends with the traditional sophomore year in college, its curriculum comprising a basic general education. The College was organized in its present form in 1937, but last year the University faculty voted to award the Bachelor's degree for its program. Though its organization was not a war-time step, the College enables students to complete their liberal education by about the age of eighteen.

The new scholarships announced by President Hutchins are of two classes. Twelve are of \$600 each and are awarded without examination on the basis of the applicant's intellectual promise and qualities of leadership. Twelve are tuition scholarships of \$300 each, and will be awarded on the basis of excellence of scholarship. Both types of scholarship will be available to secondary-school students who complete either the sophomore year or the first half of the junior year this spring, and who enter the College either in June or September. The scholarships are for one year, but will be continued through the four years if the student's record in the College is satisfactory.

**VICTORY GARDENS**—The U. S. Department of Agriculture has just released a sixteen-page pamphlet entitled **Victory Gardens**, miscellaneous Publication No. 483 as an aid for those participating in the Victory Garden Program. It is an outline of simple vegetable gardens intended to give only general information that will introduce the inexperienced prospective gardener to the subject and enable him to make a beginning. It gives elementary information on what to grow, how to prepare and fertilize the soil, how and when to plant, how to care for the plants, and how to utilize the crop. As an aid to success, Victory Gardeners should consult their state agricultural colleges, county agents, vocational agricultural teachers, local experienced gardeners, and should study the publications on gardening and storage more closely adapted to their local conditions prepared by their own state agricultural experiment stations and extension services. The U. S. Department of Agriculture also publishes several more comprehensive bulletins on the subject. The following can be obtained free from the Office of Information, United States Department of Agriculture, Washington, D. C.: Leaflet 203, **Disease-Resistant Varieties of Vegetables for the Home Garden**; Farmers' Bulletin 1044, **The City Home Garden**; Farmers' Bulletin 1371, **Diseases and Insects of Garden Vegetables**; Farmers' Bulletin 1673, **The Farm Garden**; and Farmers' Bulletin 1743, **Hotbeds and Coldframes**. The following can be purchased for 5 cents from the Superintendent of Documents, Government Printing Office, Washington, D. C.: Department Bulletin 1427, **Dry-Land Gardening at the Northern Great Plains Field Station**, Mandan, N. Dakota. Copies of **Victory Gardens** can be received from the Superintendent of Documents, Washington, D. C., at 5 cents each.

**THE NATIONAL MUSIC CAMP**—The sixteenth season of the National Music Camp affiliated with the University of Michigan will be held from June 27 to August 23, 1943, at its usual meeting place, Interlochen, Michigan. The National Music Camp has taken the lead in promoting American music and musicians. Future great symphonic works, made in America of American material will symbolize truly American idioms. Interlochen is a musical democracy in every respect. A student may compose—a rumba or a symphony—in his own style, with such guidance as he may seek from his instructors. Those with leadership qualities are given an opportunity to lead. Any student may occupy first chair in his section if he wins that right by fair competition. In such an atmosphere American music and American musicians must flourish. American composers are already writing excellent music in idioms that are readily recognizable as truly American. These composers and their music will be featured at Interlochen during the 1943 season—even more than in previous seasons. Percy Grainger, Ferde Grofe, Guy Harrison, and many other outstanding American musicians will be there to work with the ambitious musical youth of the nation. Send for the 1943 Yearbook to Joseph E. Maddy, President, National Music Camp, Ann Arbor, Michigan.

**"HANDBOOK ON EDUCATION AND THE WAR"** ISSUED—Publication of a comprehensive "Handbook on Education and the War" was announced today by the U. S. Office of Education. Based on the proceedings of the National Institute on Education and the War, the "Handbook" is an over-all survey of the major wartime problems of education. The 359-page "Handbook" is divided into two parts—one containing the full text of statements by heads of those Federal war agencies which touch education, and the other part containing reports of symposiums held on 26 of the most acute war-time educational issues. The 26 key problems are grouped under four general headings: **Training Manpower, School Volunteer War Service, Curriculum in Wartime, and Financing Education in Wartime.**

The National Institute on Education and the War, held last autumn under the sponsorship of the U. S. Office of Education Wartime Commission, was attended by over 700 of the Nation's education leaders, from every State in the Union. In the Foreword to the "Handbook," John W. Studebaker, U. S. Commissioner of Education, says: "Because it represents the best war-time thinking of so many alert minds, it should prove a useful guide to every educator in intensifying efforts to win the war." Copies are available from the Superintendent of Documents, Washington, D. C., at 55 cents each.

## EDUCATIONAL EVENTS

### Calendar

#### April

- 4 Conservation Week.
- 14 Pan-American Day. Write to Pan-American Association, Washington, D. C. for a list of their wealth of materials.
- 13-16 American Association for Health, Physical Education, and Recreation, Cincinnati, Ohio. Headquarters, Netherland Plaza Hotel.
- 24-May 1 National Boys and Girls Week. Information and helpful suggestions for observance of this celebration can be secured from National Boys and Girls Week Committee, John L. Griffith, chairman, Room 950, 35 E. Wacker Drive, Chicago, Illinois.
- 30-May 3 The Fourteenth Annual Institute for Education by Radio, Columbus, Ohio. For particulars write to Dr. I. Keith Tyler, Director, Institute for Education by Radio, Ohio State University, Columbus.

## The Book Column

### WORKBOOKS, PAMPHLETS, CHARTS, AND MAPS:

- Administering the School Work-Experience Program.** Rockville, Md.: Superintendent of Schools, 1941. 73 pp. mimeo. Discusses the work-experience program for in-school and out-of-school youth. Discusses a general philosophy as well as gives hints, suggestions, and samples of follow-up-forms useful to school men interested in providing work experience for youth.
- Aids in Bill Drafting.** Washington, D. C.: Research Division, National Education Association, 1942. 31 pp. 15 cents. mimeo. Helpful to those interested in improving the drafting of school legislative proposals.
- Allison, M. Army Office Training.** New York: The Gregg Publishing Co. 1942. 92 pp. \$1.00. This timely publication gives authoritative information on the vast business called Army Administration; and on correspondence, reports, filing, and other clerical practices that grow out of it. The comprehensive information on induction, army organization, administration, and procedures should be of interest and value to everyone. The book is adaptable for use as a text in classes giving pre-induction training for the potential clerical worker in the army, and in classes for those seeking army orientation prior to induction. The purpose of the material obviously is to reduce the army "processing" that follows induction—a goal which, when achieved, manifestly becomes an educational contribution to the war effort.
- Annual Report.** Passaic, N. J.: Public Schools, 1942. 32 pp. A report of the activities of the school system with a minimum of figures and charts.
- Annual Report, 1942.** Floral Park, New York: Sewanhaka Central High School District No. 2, 1942. 40 pp. Describes in words and pictures what this school is doing in the way of adapting its program to present-day and future needs of its pupils.
- Annual Report of the Superintendent of Schools, 1940-1941.** Chicago: Board of Education, 1942. 590 pp. An interesting word and pictorial description of the program of education in the Chicago public elementary and secondary schools.
- Approved Recommendations of the St. Louis School Survey.** St. Louis: Department of Instruction, Public School System, 1941. 151 pp. A program of improvement in instructional and administrative practices to be worked out during the next ten years in the public schools of St. Louis. Recommendations cover both the elementary and the secondary-school years.
- The Atlantic Charter and Africa from an American Standpoint.** A Study by the Committee on Africa, the War, and Peace Aims. New York: Africa Bureau, 156 Fifth Avenue, 1942. 75 cents. When issued with supplement. \$1.00. The application of the "Eight Points" of the charter to the problems of Africa, and especially those related to the welfare of the African people living south of the Sahara, with related material on African conditions and needs. The Committee on Africa, the War, and Peace Aims, sponsored by the Phelps-Stokes Fund of New York, has prepared these volumes which should be of value to all persons interested in Africa and the war situation, in inter-racial questions, and in the problems of world organization and peace. This is the first study of the subject by an American group made up almost entirely of men and women who have lived in Africa or who visited it for purposes of serious study, and it aims to cover all the major problems of Africa—political, social, educational, and economic—with constructive suggestions as to their solution. The supplement, **Events in African History**, (67 pp. 50 cents) lists more than 350 important events from 4241 B.C. to 1942 A.D.

- Baudek, A. C., and Whipple, G. G. **Engine Lathe Operations**. Bloomington, Ill.: McKnight and McKnight. 1942. 156 pp. \$1.60. 310 illustrations and 8 blueprints. A new instructional manual for beginners presenting a series of operational units, accompanied by units containing the necessary technical information for later application in selected jobs.
- Besso, H. V., and Lipp, Solomon. **Conversation: Spanish for the Army and Navy of the United States**. New York: Hastings House. 1942. 294 pp. paper 75 cents; cloth \$1.50. A WPA project sponsored by the army and navy air forces of the U. S.
- Bodde, Derk. **China's Gifts to the West**. Washington, D. C.: American Council on Education. 1942. 40 pp. 35 cents. Offers substance and content for increasing and improving Asiatic Studies in schools. Helpful suggestions for teachers of science, shopwork, and the arts as well as social studies.
- Bogardus, E. S. **Democracy by Discussion**. Washington, D. C. American Council on Public Affairs. 1942. 59 pp. \$1.00. Discusses nine types of discussion groups, and describes the value of discussion groups, their inception, and the group in action. A helpful guide.
- Boletín Bibliográfico Mexicano**. Mexico, D. F.: Librería De Porrúa Hermanos Y. Compañía, Esquina Argentina Y Justo Sierra, Apartado 7990. 1942. A monthly publication reviewing Mexican publications.
- Brainard, Gladys. **Identifying and Diagnosing Students Needing Remedial Reading**. Urbana, Ill.: C. W. Roberts, 24a Lincoln Hall. 1943. 16 pp. 15 cents. A symposium presented at a conference on the subject.
- Brand, Michael, and Schmid, Edward. **Instrument Makers**. Mono. No. 34. Chicago: Research Associates. 1700 Prairie Ave. 1943. 48 pp. 60 cents. The interesting story of the making of those instruments that are essential for the efficient operations of our big guns, our bombers, and our ships and submarines in the conduct of this war.
- Bunting, D. E. **Liberty and Learning**. Washington, D. C.: American Council on Public Affairs. 1942. 147 pp. \$2.00. Describes the work of the American Civil Liberties Union to maintain and strengthen the principles of academic freedom in the schools and colleges of America.
- Bureau of Child Study and the Chicago Adjustment Service Plan**. Chicago: Board of Education. 1942. 170 pp. What the Chicago public school system is doing in the way of child study and adjustment service.
- Bureau of School Service. **The Utilization of Potential College Ability Found in the June 1940 Graduates of Kentucky High Schools**. Lexington: University of Kentucky. 1942. 101 pp. 50 cents. This study made by H. L. Davis presents an analysis of the problem and of the factors which influence college attendance in Kentucky. Another Bulletin by the Bureau of School Service is that entitled **Proceedings of the 19th Annual Educational Conference and the 8th Annual Meeting of the Kentucky Association of Colleges and Secondary Schools** (1942. 114 pp. 50 cents). Topics discussed include religion in the schools, functions of the private secondary schools and the growth of secondary education in Kentucky.
- Burns High School Handbook**. Burns, Kan.: Superintendent of Schools. 1942. 46 pp. mimeo. Pertinent information about the school and its program of studies for pupil and parent use.
- Business Education for Today's and Tomorrow's World**. New York: Society for the Advancement of Research in Business Education, Teachers College, Columbia University. 1942. 40 pp. 50 cents, mimeo. A report of the proceedings of the conference held July, 1942.



- Chapman, P. W. **Your Personality and Your Job**. Chicago: Science Research Associates. 1942. 57 pp. 60 cents. Discusses personality, provides a rating scale, as well as discusses appearance, winning friends, being dependable, and personal growth.
- Charters, W. W., and Fry, V. W. **Recreation Leadership Training**. Columbus: Bureau of Educational Research, Ohio State University, 1942. 173 pp. \$2.00. Planographed. Reports studies on supply and demand, classification of recreation activities, an analysis of the activities, duties, responsibilities, problems, and interests of recreation workers, an analysis of essential personal qualities and a proposed college training curriculum following the findings of the study.
- Cholet, Bert, compiler and editor. **Script and Manuscript**. Brooklyn: Higgins Ink Co. Inc. 1943. 36 pp. 50 cents. The main section of the book is devoted to 32 modern script alphabets with an explanation of their uses. Amongst the instructional pages on lettering are several devoted to manuscript writing and others to engrossing.
- Community Occupational Surveys**. Bulletin No. 223. Washington, D. C.: Superintendent of Documents. 1942. 199 pp. 25 cents. Discusses pre-war preparation with post-war application. Presents techniques for community occupational surveys based on the experience of those who have conducted such surveys. It should be helpful to illustrate current methods and at the same time be a stimulation for future contributions to this particular type of local occupational research.
- Cornet, W. H. **Methods of Measurement**. Bloomington, Ill.: McKnight and McKnight. 1942. 95 cents. This is a text-workbook that directs the student to various types and standards of measurement used in industry; to give him a knowledge and understanding of the best recognized theory and procedures in measuring methods that he will encounter on the job; and to provide definite operational exercises that direct the student's practice in making accurate, exact measurements.
- Cornet, W. H., and Fox, D. W. **Principles of Electricity**. Bloomington, Ill.: McKnight and McKnight. 1943. 255 pp. \$1.60. Contains 34 teaching units, each having instructional procedures, supplemented with illustrated information units and many reports and tests.
- Crane, F. A. **Planning Cities for Today and Tomorrow**. Evanston, Ill.: Row, Peterson. 1942. 48 pp. Based on the assumption that youth learn that better living conditions can be attained when citizens become interested in their community, the booklet tells an interesting story of why cities need planning, what would result if cities were planned, and how cities are planned.
- Creedy, B. S. **Consumer Problems and Projects**. New York: The Woman's Press, 600 Lexington Ave. 1942. 72 pp. 35 cents. A helpful guide to study groups for a study of the field of consumer problems giving specific suggestions in developing a program of investigation and then outlines a study and investigation plan for each of the following topics: food, clothing, housing, health, personal care, recreation, and savings.
- Cunliffe, R. B., et al. **Guidance Practice in New Jersey**. 1942. 148 pp. \$1.00. A report on a state-wide survey of guidance practices—descriptions of practices based on first-hand investigation of the guidance programs of 12 representative schools. The study is recommended to those who are interested in the guidance of youth.
- Dallas, Hellen. **How to Win on the Home Front**. New York: Public Affairs Committee. 1942. 32 pp. 10 cents. A useful and detailed home management guide containing specific aids on wise buying, and the proper care of food, clothing, and household equipment.

- Department of Education. **A Proposed War-time Guidance Program for High School.** Baton Rouge: Louisiana State Department of Education. 1942. 18 pp. mimeo. A recommended partial answer to the perplexing guidance problem of how the high schools can meet new and vital challenges.
- Department of Education. **Mathematics Essential for the War Effort.** Tallahassee, Fla.: State Department of Education. 1942. 395 pp. Intended as a review course for high-school seniors. The book begins with the fundamentals of arithmetic and advances through equations to the reading of graphs and the study of logarithms, the slide rule, vectors, plane and spherical triangles, and other problem solving situations.
- Department of Education. **Professional Background Materials for War Mathematics.** Tallahassee, Fla.: State Department of Education. 1942. 80 pp. Contains interpretative materials, primarily illustrating applications of elementary mathematics to war problems, includes map projections, vectors, and navigation.
- Department of Public Instruction. **Victory Corps Series**, "45 Suggested References for the Victory Corps Library Corner" No. 5, (4 pp. mimeo.) and "Mathematics in the Victory Program" No. 6. (7 pp. mimeo.). Des Moines, Iowa: State Department of Public Instruction. 1943. Helpful suggestions.
- Department of Public Instruction. **War-time Action for Michigan Schools.** Lansing: Department of Public Instruction. 1942. 11 pp. mimeo. Contents consist of adjusting the school program, preparing youth for service, understanding war aims and American ideals and controlling inflation and conserving resources.
- A Diagnostic Approach to the Reading Program.** New York: Board of Education of the City of New York. 1942. Part I, 25 pp.; Part II, 32 pp. The one pamphlet (Part I) discusses the nature of the problem, approaches to the study of reading failure, and the orientation of the teacher, while the other pamphlet (Part II) discusses classroom diagnostic methods and the intensive study of the pupil in the classroom together with conclusions and a bibliography.
- DuBois, R. D. **National Unity Through Intercultural Education.** Washington, D. C.: Superintendent of Documents. 1942. 34 pp. 15 cents. Describes ways in which some schools as well as other agencies have tried to emphasize that American culture is truly a composite of many cultures and to nurture attitudes of friendliness and goodwill among the youth of varied cultures thus releasing tensions, fostering the feeling of security, strengthening democracy, and enriching American life.
- Edelstein, J. C. **Alaska Comes of Age.** New York: American Council, Institute of Pacific Relations. 1942. 62 pp. 15 cents. Excellent source material concerning this territory which is today making the headlines.
- Edman, Marion. **Bibliography of Children's Books on Latin America.** Detroit: Public School System. 1942. 24 pp. mimeo. File No. 2363. An annotated bibliography organized by countries and classified for grade-reading level for elementary pupils.
- Education's Present Responsibility Toward the Exceptional Child.** Longhorne: Child Research Clinic, The Woods School. 1941. 63 pp. A series of papers by leading authorities in their field treating various phases of the exceptional child. Another bulletin (Mar 1942, 50 pp.), **The War-time Adjustment of the Exceptional Child**, likewise presents papers by other authorities in their field upon war-time effects.
- Eells, W. C. **Development of Higher Education—Wise and Otherwise.** Washington, D. C.: American Association of Junior Colleges. 1942. 38 pp. Discusses some of the changes that are taking place in higher education. The author takes issues with some of these changes especially the awarding of a bachelor's degree at the Junior College level.
- Evaluation of the 4-H Clothing Project in Massachusetts.** Washington, D. C.: U. S. Department of Agriculture. 1942. 32 pp. Free. The report on a study to determine

the degree to which five selected 4-H educational objectives are being reached by the girls who participated in the 4-H clothing project.

**Facts About Teeth and their Care.** Washington, D. C.: National Dental Hygiene Association. 1942. 16 pp. 10 cents. A compilation of facts regarding teeth and their care.

Federal Radio Education Committee. **War Savings Radio Scripts.** Washington, D. C.: U. S. Office of Education. 1943. 26 pp. mimeo. Suggestions for school radio programs about war savings with scripts of five programs presented by the Cleveland, Ohio, public schools.

Fisher, Robert. **Intensive Clerical and Civil Service.** New York: South-Western Publishing Co. 1943. 190 pp. Provides an intensive and integrated pre-employment preparation in the basic skills necessary for clerical positions. The materials are based on a careful study of personnel practices.

**Forward With Freedom.** Santa Barbara, Calif.: Public Schools. 1942. 84 pp. 25 cents.

This pamphlet was prepared by members of the teaching staff to help pupils develop a concept of democracy, not only as it is in America, but as it is in the other democratic countries of the world. It is pointed out that although each democracy has its own pattern of government, all have the same high ideals. These ideals are then dealt with, showing what they are and why they are worth fighting for. Alongside this picture of democracy is spread the picture of fascism, its ideals, and for what the fascist countries are fighting. The danger of fascism to democracy is clearly presented and suggested plans for the peace are indicated. This pamphlet was prepared to meet the needs of the Santa Barbara boys and girls for a book of their own, one which they could understand, study, and ponder. It gives the classroom teacher an organization of materials that may help her in presenting world problems to her class. It offers suggestions for activities, visual aids, and a short bibliography. It is not meant to be a comprehensive treatise, but is only a suggestion which may be used as a point of departure.

Galloway, G. B. **Post-War Planning in the United States.** New York: The Twentieth Century Fund. 1942. 158 pp. 60 cents. Describes the work of 35 government agencies, 33 private agencies, 11 industrial and financial organizations, 16 trade associations, and 7 rail, highway, water, and other transportation agencies now actively engaged in post-war planning research and says that further investigation undoubtedly would reveal more. Much of the research is still in the planning stage. The report catalogs the leading agencies, lists and classifies the projects each has under way, and includes a bibliography of current books, pamphlets, and articles on post-war planning.

Goff, F. L., and Novak, L. R. **Reading Aircraft Blueprints.** Bloomington, Ill.: McKnight and McKnight. 1942. 50 Blueprints, \$2.00. This instruction presents blueprints typical of those in use in the construction of modern planes in the aircraft industry today. These blueprints were prepared by aeronautical engineers, and are made to scale, specifically for the page size of this book. Details are clear, thus easily read by pupils.

Goodfellow, R. C., and Kahn, Gilbert. **Projects in Clerical Training.** New York: South-Western Publishing Co. 1942. 252 pp. Contains 89 job sheets using actual business records and reports selected from six types of businesses with the purpose that pupils receive training specifically for a clerical responsibility in any type of business—that of reporting and recording business transactions and activities.

Graves, M., and Cowan, J. M. **Report of the First Years Operation of the Intensive Language Program of the American Council of Learned Societies.** Washington, D. C. The

- American Learned Societies, 1219 16th St. N.W. 1942. 40 pp. Describes the various language courses offered under this program.
- Gray, Henry. **Gases, Bombs—First Aid at a Glance.** Washington, D. C. Educational Research Bureau, 1321 M Street, N.W. 1942. 1 p. 25 cents. A reference chart (19x20 in.) giving information about gases and bombs as well as giving first aid based on this information about them.
- Greenleaf, W. J. **Working Your Way Through College.** Washington, D. C.: Supt. of Documents. 1941. 175 pp. 20 cents. Discusses the problem of financing a college education giving source of aid by states as well as suggestions for obtaining jobs with pay. Gives learning possibilities in a large group of colleges in the United States.
- A Guide for Construction and Revision of Curricula.** Passaic, N. J.: Superintendent of Schools. 1942. 12 pp. mimeo. Discusses the general problems, how to select committees, developing curriculums on a horizontal or a vertical basis, the organization of committees to construct a 13-year program of teaching-learning experience in a subject-matter field and the general plan for action.
- Guiding Principles in Curriculum Development.** New York: Board of Education. 1943. 32 pp. Lists and discusses twelve guiding principles which will be helpful to those engaged in curriculum development or adaptation.
- A Handbook for the High-School Activity Sponsor.** Jefferson City, Mo.: State Superintendent of Public Schools. 1940. 181 pp. Presents interesting experiences of sponsors in working with boys and girls in extracurriculum situations. Discusses, the student council, the homeroom, the assembly, the high-school social program and clubs—each having illustrations of practices.
- Handbook of War Savings School Assembly Programs.** Washington, D. C.: U. S. Treasury Department. 1943. 78 pp. Contains scripts of 5 War Savings plays for school assembly use.
- Hausrath, A. H. and Harms, J. H. **Let's Investigate.** New York: Macmillan Co. 1942. 154 pp. 80 cents. A workbook based on an experimental approach to be used in connection with a consumer science course. In addition to the general plan of procedure suggested in each unit, supplementary activities are added to each unit. It is adaptable for use with most regular science texts.
- Health Bulletin for Teachers, Volume XIII. New York: Metropolitan Life Insurance Co., School Health Bureau. 1942. 40 pp. Under the general topic of "The Health of the Nation," the pamphlet discusses many phases of the school health program in relation to the pupil, the parent, the teacher, the home, the worker, medicine, and public health.
- The Heart of the School.** School Betterment Studies. No. 3, Second Edition. Pittsburgh, Pa.: Henry C. Frick Educational Commission. 1942. 96 pp. Single copies, free. The modern high-school assembly period, recognized as the beating heart of the school, has been made the subject of intensive study for sixteen years, in order to help find the most effective procedure for its operation as a potent power plant for student morale. The study presents a record, analysis, interpretation, and application underlying a modern high-school assembly program. It suggests concrete methods by which the limitless power latent in the hearts of youth may be released, in worthy forms of self-expression, for universal welfare and in that form of culture which we know as the American Way.
- Helbing, A. T. **Jobs in the Aircraft Industry.** Mono. 33. Chicago: Research Associates. 1943. 49 pp. 60 cents. Analyzes the aircraft industry as to working conditions, training, possibilities, and earnings.

- Heimers, Lili. **Flying and Weather**. Upper Montclair: New Jersey State Teachers College. 1942. 22 pp. 50 cents. mimeo. An annotated list of periodicals, publications, charts, maps, films, slides, recordings, etc. to teach pre-flight aeronautics.
- Heindel, R. H. **The Integration of Federal and Non-Federal Research as a War Problem**. Washington, D. C.: National Resources Planning Board. 1942. 122 pp. mimeo. Studies the need of the government for "farming out certain research to non-Federal agencies."
- Howard, L. S. **War Supplement to the Road Ahead**. Yonkers-on-Hudson: World Book Co. 1942. 32 pp. Directed to the needs of young people who are seeking answers to the many problems which confront them today, this supplement of the author's more complete book deals with thirteen of these specific questions.
- Institute of International Education. **Twenty-Third Annual Report of the Director**. New York: the Institute, 2 W. 45th St. 1942. 50 pp. Free. An interesting brief account of international education. Contains a list of college institutions in the U. S. which have accepted foreign students under the auspices of the institute of International Education for the college year, 1942-43.
- Inter-American Education Demonstration Centers. Washington, D. C.: U. S. Office of Education. 1942. 14 pp. Free. Describes the work of the centers (31 in number) done in co-operation with the Office of Co-ordinator of Inter-American Affairs.
- Jones, W. P. **Practical Word Study**. New York: Oxford University Press. 1943. 94 pp. \$1.00. Stresses word-building elements in the order of frequency of their appearance in common English words. The main divisions are Dictionaries and How to Use Them, How New Words are Made, Latin and Greek Roots, How Words Change Their Meaning, How Words Get Paired, and Optional Material for Special Vocabulary. There is also a final vocabulary test and an answer book for teachers.
- Kaltenborn's 1942 War Atlas. Chicago: The Pure Oil Company. 35 E. Wacker Drive. 1942. 16 pp. 10 cents each. In quantities of 50 or more 8 cents each. Consists of 11 colored maps, 10x12 inches, which together show the entire world; also contains a 14x21 inch map of the world, mercator projection and a chronological listing of important world events for the years, 1939-42. Excellent for pupil and teacher use.
- Knappen, M. M. **Preserving Democracy—What Is Democracy**. East Lansing: Michigan State College, Extension Division. 1942. 20 pp. One of a series of bulletins being issued by the Extension Division. Deals with the general idea of democracy, the objection our enemies make to it, and what our answers are. Succeeding bulletins will cover such topics as the rights and duties of the citizen, representation, law making, and law enforcement.
- Landry, R. J. **Magazines and Radio Criticism**. Washington, D. C.: National Association of Broadcaster. 1942. 16 pp. Free. An answer to the criticisms of American radio.
- Lazarsfeld, P. F. **What We Really Know About Daytime Serials**. New York: Columbia Broadcasters. 1942. 16 pp. Free. An answer to the criticisms of American radio. report on research work directed by Dr. Herta Herzog will be published later this year by Duell, Sloan, and Pierce, New York, under the title, **Radio Research**.
- Leisure Time Activities of Junior High-School Boys. Beloit, Wis.: Beloit Public Schools. 1942. 31 pp. mimeo. Data collected from a community survey in Beloit. Many curriculum implications are contained in these data and analyses of data.
- Losey, Mary. **Films for the Community in Wartime**. New York: National Board of Review of Motion Pictures, Inc. 70 Fifth Ave. 1943. 78 pp. 50 cents. Shows how the motion picture can be used to explain what this war means in our daily life and what each of us can do to help win it.

- Lowenberg, M. E. **Food for Young Children in Group Care.** Washington, D. C.: Superintendent of Documents. 1942. 34 pp. 10 cents. Being prepared as a guide to those responsible for the feeding of young children, this pamphlet will be found helpful by classes in child care, nutrition, and similar studies.
- Mackay, C. B. editor. **Ways to Victory.** Providence, R. I.: Office of Price Administration. 1942. 75 pp. Planographed. Under the subtitle, **The Civilian's Share in Winning the War**, Part I prepared as a guide to teachers discusses various phases of the subject while Part II outlines five teaching units.
- Mathematics, Visual and Teaching Aids.** Upper Montclair: New Jersey State Teachers College. 1942. 17 pp. 25 cents. mimeo. An annotated bibliography of visual and other teaching aids in the field of mathematics.
- May, J. T. **Rapid Review of Elementary Algebra.** New York: Emerson Books, Inc. 251 West 19th Street. 1942. 32 pp. 18 cents. A quick, efficient review for class or individual use. Though concise, all main points are covered for a thorough review. May be used with or without other texts.
- McCabe, M. R. **An Annotated List of Periodicals Useful in the Study of Latin American Countries.** Washington, D. C.: U. S. Office of Education. 1942. Free. Classified under 5 main headings showing scope, frequency of publication, and price of each.
- Michaelis, L. S. **How the Body Works.** New York: Longmans, Green. 74 pp. 65 cents. A functional study of the human body interestingly presented by words, pictures, diagrams, and charts. Also devotes a section to first aid.
- Montes de Oca, J. G. **La Navidad en Queretaro.** Forest Hills, New York: Las Americas Pub. Co. 1942. 67 pp. 50 cents. \$3.00 for the series of six. One of the six American series of contemporary Latin American authors written in fairly easy Spanish. The story of one of Mexico's literary personalities who sees his country with the eyes of an artist.
- Mosier, C. F. **Evaluating Rural Housing.** Gainesville: University of Florida. 1942. 88 pp. 50 cents. A report on the extent of change in housing conditions in selected communities in which housing instruction has been stressed in the schools. The study has the assistance of the Alfred P. Sloan Foundation, Inc. and the co-operation of the State Department of Education and local school authorities. This report is concerned with the measurement phase of the project and explains how the houses in selected communities were rated at the beginning of the project. It is unique in that it presents the development of an **Housing Inventory** and an **Index of Housing Adequacy**. This report makes a contribution in the field of housing and provides a plan of rating houses which should be of value in many circumstances. Contains pertinent information concerning housing standards in 6 rural communities as well as concerning scholastic achievements in the schools of these communities.
- Mullen, F. E. **The Heritage of Leadership.** New York: National Broadcasting Co. 1942. 16 pp. Free. Points out the need for leadership and the exercise of it to its fullest potentialities—this latter the author contends has not been done.
- Nation at War.** Chicago: F. E. Compton and Co. 1942. 32 pp. Reprinted from **Compton's Pictured Encyclopedia**, the article presents the main outlines of the most gigantic and far-reaching task ever undertaken by any nation in the history of the world—the work on the home front.
- National Americanism Commission. **Victory Corps Military Drill Instructor's Manual.** Indianapolis, Indiana: The American Legion. 1943. 139 pp. Designed to train young men in the fundamentals of military life—a guide to the establishment and conducting of pre-induction basic military drill training courses for which the American Legion voluntarily offers to train and furnish qualified drillmasters to secondary schools. This pre-induction course is proposed as one that will strengthen the Victory Corps program.

- National Conservation Bureau. **War and Motor Car.** New York: The Bureau. 1942. 32 pp. 15 cents. Contains suggestions to civilian drivers on how to handle themselves and their automobiles under various war situations plus hints for tire, fuel, and vehicle conservation.
- National Council of Chief State School Officers. **School Transportation in Wartime.** Washington, D. C.: American Automobile Association. 1942. 101 pp. 50 cents. School transportation has become essential to an adequate education program for nearly a sixth of all the children attending the public schools in this country. It is the responsibility of school officials to see that every practicable adjustment in the school transportation program is made. This handbook proposes policies and procedures prepared through the co-operative efforts of numerous organizations from many fields in addition to education.
- National Education Association. **State School Finance Systems.** Washington, D. C.: the Association. 1942. 46 pp. 25 cents. In view of the imminent need for Federal aid, this bulletin describes state systems of school support. Useful as a handbook of practice for those interested in legislative programs.
- National Education Association. **War-time Handbook for Education.** Washington, D. C.: the Association. 1943. 63 pp. 15 cents. Practical suggestions for war-time policy and procedure in the schools of the nation.
- New Tools for Learning.** New York: Public Affairs Committee, Inc. 7 West 16th St. 1943. 28 pp. Free. A list of materials for discussion-group, teacher, and pupil use, classified under twenty-one topics of vital importance today.
- A New Way Every Day to Enjoy Iron.** New York: American Molasses Company, 120 Wall Street. 1943. 24 pp. An illustrated booklet, 7x10 inches, containing 62 molasses recipes. Nine of the recipes have been prepared especially for very young cooks, and the other 53 recipes are easy and quick to use. The book explains the properties, nutritive values and uses of old-fashioned molasses and why it is one of the richest sources of iron. Also write for a practical lesson sheet entitled—**Molasses—What It Is.** The two 4-page Meal-Craft Demonstration Sheets (8½x11), illustrated, punched for note book; and a **Teaching Chart**, 22x17, in full color. This educational material offered free only to teachers in New England, New York, New Jersey, Pennsylvania, Delaware, District of Columbia, North Carolina, South Carolina, Illinois, California, Oregon, Washington, Maryland, Virginia, West Virginia, Florida, Georgia, Ohio. Available in other states at 25 cents per set.
- Our War—Our Victory.** Washington, D. C.: Superintendent of Documents. 1942. 24 pp. Free. Supplementary reading material for foreign-born pupils.
- Pennsylvania Historical Commission, **What to Read About Pennsylvania** (97 pp.), **Pennsylvania History and Morale** (10 pp.), **Pennsylvania History in Outline** (32 pp.), **Some Pennsylvania Leaders** (16 pp.). These are a series of bulletins designed to arouse interest in the story of the contributions of Pennsylvania to the development of the United States. Available from The State Historical Commission, Harrisburg, Pa.
- Peterson, Florence. **Careers in Labor Relations.** Chicago: Science Research Associates. 1943. 49 pp. 60 cents. Discusses existing jobs and jobs that are rapidly developing in the field of labor relations. In this relatively new and growing field, men and women are finding opportunities. What they do, what training, leadership and experience is needed, the "ups and downs" of the work are all interestingly discussed.
- Pollak Foundation for Economic Research. Newton, Mass. **One Hundred Problems in Consumer Credit** (55 pp. 10 cents). Problems for use in junior and senior high school courses in mathematics, consumer education, or economics. **How Easy Are Easy Payments?** (1940, 28 pp. 10 cents). Points out some of the pitfalls of the "Easy



Payment" plan. **Small Loan Laws of the United States** (1941, 24 pp. 10 cents) Outlines the regulations by states. **Consumer Credit Controls**. (1941, 23 pp. 10 cents). Points out the need for credit control to protect the consumer and avoid inflation. **Damming and Diversion of Consumer Credit**. (1942, 22 pp. 10 cents). Shows dangers if credit controls are increased.

Potthoff, E. F. **An Analysis of Spelling Lists in College Rhetoric, and Composition Text-books**. Urbana, Ill.: C. W. Roberts, 24a Lincoln Hall. 1942. 27 pp. 15 cents. An analysis of twenty books listing the words and comparing them with the Horn and the Thorndike lists.

**The Present Crisis**. Bulletin No. 80. Rockville, Md.: County Superintendent of Schools. 1942. 61 pp. mimeo. The professional yearbook of the county. Suggest techniques in administering, supervising, and interpreting the school program as well as in modifying the program of instruction.

**Proceedings of the 57th Annual Meeting of the New York State Association of Secondary-School Principals**. Naples: A. O. Jenkins, Secretary. 1942. 92 pp. Addresses on general subjects of secondary education adjusted to present-day needs.

**Programs of Studies of Toledo Public High Schools**. Toledo, Ohio: Superintendent of Schools. 1940. 64 pp. Prepared for pupil and parent use to assist them in making wise selection of subjects to be followed during the ensuing four years of the pupil's high-school life.

Publications of the Association for Childhood Education, 1201—16th St. N. W., Washington, D. C.

**Make it for Children**. 1942. 36 pp. 50 cents. Descriptions, photographs, and sketches useful in the making of furniture, apparatus, toys and other equipment for home and school use. High-school woodworking classes will find these things easy to make. **1942 Yearbook**. 1942. 72 pp. 25 cents. The fiftieth anniversary yearbook of the association, containing a review of its work, community reports, constitution, list of its branch associations, and other data.

Publications of Row, Peterson, and Co. Evanston, Illinois, each published in 1942, and contains 84 pages that have been prepared by Sydney Greenbie. Price, 56 cents each. Each book in **The Good Neighbor Series** contains the following features: a decorative map of the Western Hemisphere; full-color pictures of the flags of the countries discussed; pictures treating varied subjects such as historic, scenic, and typical activities of the people; **The Good Neighbor Series** provides the answers to many questions which lead to an appreciation and understanding of the twenty Latin American republics. Included in the series are: **Next-Door Neighbor**, (Mexico); **The Central Five**, (The Central American Republics); **Three Island Nations**, (Cuba, Haiti, Dominican Republic); **By Caribbean Shores**, (Venezuela, Colombia, Panama); **Children of the Sun**, (Peru, Ecuador, Bolivia); **Republics of the Pampas**, (Argentina, Uruguay, Paraguay); **The Fertile Land** (Brazil); and **Between Mountain and Sea**, (Chile). For junior and senior high school use.

Publications of the American Technical Society, Drexel Avenue at 58th Street, Chicago. **Aerial Navigation**. 1942. 64 pp. 75 cents. Beautifully illustrated with drawings and photographs. The text material together with the questions and answers in the back provides an excellent teaching aid to learn "how to do it."

**Arc Welding**. 1942. 103 pp. \$1.25. Consists of 40 jobs with an information sheet and a sheet of check-up questions for the first 32 jobs. A job information sheet is furnished with the last eight jobs. Separate check-up question sheets, 30 cents each.

**Gas Welding**. 1942. 92 pp. \$1.25. Consists of 40 jobs with a job information sheet and a check-up question sheet for the first 28 jobs. A job information sheet is furnished with the last twelve jobs.

**Fundamentals of Electricity** (106 pp.) **Fundamentals of Machines.** (83 pp.) **Fundamentals of Shop Training.** (90 pp.). Each of these three workbooks published in 1943 and selling for 50 cents each are based on a six-step plan of training—the lecture, the lesson assignment, the lesson quiz, the self-test examination, correcting the self-test examinations, and the final comprehensive examination—prepared specifically for pre-induction training for those preparing for war service; adaptable for use under a wide variety of situations and conditions. These workbooks were prepared to accompany texts by the same title which the company has recently published.

Publications of the Chamber of Commerce of the United States, Washington, D. C. Published in 1942. Single copies, free.

**The American Economic System Compared With Collectivism and Dictatorship.** (36 pp.). This pre-war, illustrated booklet sets forth principles underlying communism, socialism, fascism, nazi-ism, syndicalism, and anarchism.

**America's Economic Strength in Time of War.** (20 pp.) Discusses natural resources, industries, power, transport, merchant marine, finances, and trade. Proposes basic defense policies, including industrial mobilization and educational orders.

**Business Men's Organizations and the War Program.** (8 pp.) Subjects dealt with include: community protection, plant protection, recruiting of personnel for armed forces, expediting production, providing essential materials, war financing, emergency housing, and others.

**Common Interests and Agencies of Canada and the United States** (24 pp.) The Canada-United States Committee, describes joint war agencies maintained by the two nations; war's effect on Canada-United States trade; Commissions on boundary, and related questions.

**Fighting Through to Victory** (4 pp.) Discusses the magnitude of the war program; production goals; army, navy, aviation, and merchant marine expansion; plant protection; military secrecy; physical training in schools; and related topics.

**List of Publications** (1942. 41 pp. Free.) Arranged by subjects and grouped by departments, it gives a comprehensive outline of the Chamber's work.

**Plant Protection in Wartime.** (4 pp.) A summary of government assistance available to war-production plants in protecting themselves against war and related hazards.

**Policies Advocated by the Chamber of Commerce of the United States** (64 pp.) Recent National Chamber policies, particularly war policies adopted at 1942 Annual Meeting.

**Revenue Act of 1942** (8 pp.). A record of fundamental principles for war financing recommended by business men.

**Safeguard Industry Against Fire for National Defense** (24 pp.). Practical suggestions for industry to reduce fire hazard and fire waste are set forth in this booklet of National Fire Waste Council affiliated with the National Chamber.

**Some Problems of Foreign Traders in Wartime.** (12 pp.). Foreign Commerce Department Committee discusses governmental controls on foreign trade; government entrance into foreign trade; British-American trade relationships; Rio de Janeiro Conference; and related subjects.

**Staggered Hours** (20 pp.). Stresses the importance of staggering business, school, and working hours to relieve local transportation difficulties.

**The Sugar Problem of the United States** (28 pp.). An analysis of the Agricultural Department Committee, made previous to United States entrance into war.

**Union Security** (20 pp.). Reproduces the documents relating to Walker-Turner Company case, the first action by National War Labor Board ordering union security.

**Vocational Training in Wartime** (36 pp.). Outlines a co-operative program for wartime job training in local communities and discusses basic types of training; occupa-

tions for which training may be given; present training programs, especially training-within-industry; existing training agencies including schools and colleges participating in program.

Publications of the Denoyer-Geppert Company. 5235 Ravenswood Avenue, Chicago.

**Atlantic Charter Map.** A Pictorial Map of the World. Size, 45x35 inches. 1 unmounted paper sheet, \$3.00; plain wood rollers at top and bottom, \$5.00; spring roller and board, dustproof, \$8.00; on compoboard, lacquered, with 1½" ebonized frame, \$12.00; and on compoboard, lacquered, 3" frame (size 49x35½ inches), \$14.50. An exceptionally beautiful map in six brilliant colors designed to illustrate the principles embodied within the Atlantic Charter, the wording of which appears in a panel above the map proper, with facsimile signatures of Roosevelt and Churchill. Seas are colored blue and land areas are in white. City names are printed in black on red scrolls, islands on yellow, quotations on buff. 32 symbols, representing animals, vegetables and minerals, are in various colors. The decorative border is in red, blue, yellow, and black. The map has been designed by Macdonald Gill, famous pictorial artist. This is a new pictorial map. It is not a classroom teaching map. It is a more decorative map. This map framed will undoubtedly appeal to principals as a decoration in their offices or reception rooms, as well on the walls of the classroom. Excellent as class memorials.

**The Life of Lincoln in Pictures.** Size, 18½x21½ inches. Prices: paper sheet for framing, separately, \$3.00, per set of 12, \$27.50; on Masonite with 3" frame, \$10.00; and under glass with 3" frame, \$11.00. When a full set of framed pictures is ordered there is a discount of \$10.00 on the set. Full-color reproductions of twelve original oil paintings by Louis Bonhajo. Titles of the pictures are: The Boy Lincoln; Flat Boat to New Orleans, 1828; Lincoln Moves to Illinois, 1830; Lincoln, the Rail Splitter; Lincoln, the Story Teller; Lincoln, the Country Lawyer; Lincoln's First Nomination, May, 1860; Lincoln Signs the Emancipation Proclamation; Lincoln With his Son, Tad; Lincoln at Gettysburg, Nov. 19, 1863; Lincoln Visits Grant, 1865; Lincoln Memorial, Washington, D. C. The series is one of the finest imaginative works on Lincoln ever undertaken, and the many authorities and students of Lincoln who have seen them have been deeply impressed by the artistry, accuracy, and historical significance of Mr. Bonhajo's work. The originators of this plan did not hurry just to produce a set of pictures. The greatest care and deliberation were exercised in every phase of the undertaking, a few of which were: choice of subject matter; historical research and authenticating every detail so that each episode portrayed would be historically accurate; the discriminating and very important task of finding the right artist; and then a printer who could convey to paper what the artist had done to canvas.

**The Milo Winter Muragraphs.** Size, 26x35 inches, framed 29x35 inches. Prices: unmounted print (heavy art paper), \$2.50; on masonite, attractively framed, \$12.00; and under glass, attractively framed, \$13.50. Here are inspirational portraits of ten leaders of mankind who have left an everlasting impress upon the world's progress and man's ideals through the tremendous lifemoulding force of their epic achievements and heroic spirits. They typify, in part, the spirit of science, exploration, chivalry, the hero of legend, the statesman, the idealist, the nation builder, the saint, the patriot, the painstaking craftsman—history's hall of fame—all calling up some part of thrilling history; all waking in pupils the urge to study the lives of these great characters to seek, to know, to achieve—to follow in the footsteps of genius incarnate. Careful study and research has made accurate the most minute details in each monograph. Dress, physical features, tools, arms, accessories, landscapes, buildings have been executed with the most painstaking attention to records, wood-cuts, paint-

ings, and replicas of ancient times. Inspiring is the very artistry itself of these ten picture-classics. Distinctively conceived, brilliantly executed, each character powerfully portrays the ideals that prompted its selection. The artist, Milo Winter, is a nationally known illustrator of children's books. The titles are: Robin Hood, Galileo, Elizabeth Tudor, William Caxton, Achilles, Peter the Great, Leif Ericsson, Saint Francis of Assisi, Joan of Arc, and Edward the Black Prince. These murographs should add much to beautify the classroom walls and relieve school corridors. They will also serve as excellent class memorials.

**The Polar Aeronautical Wall Map.** Size, 44x60 inches. In preparation. Prices: plain wood rods top and bottom, \$5.75; spring roller, steel board, dustproof, \$7.50; in cylindrical steel case, \$8.50; dissected to fold them with oil cloth faces, \$7.25; and dustproof unit for case—one map on a roller, \$7.50. It is drawn 400 miles to the inch in four colors—outline, blue, yellow, and black. It shows air routes including present commercial routes and great circle routes—all in statute miles. Political divisions are shown, but not in separate areal colors. Land areas are shown in color. All important world cities and key air centers are shown. It also contains an arc of the South Polar Region on the same scale as the main map. In this present day and age and under our present world-made contacts, this map will fill a very important need.

**Soviet Russian Atlas.** Size 10x7½ inches. Price \$1.00. This new atlas gives in true perspective the picture of the vastness of the great Soviet Union. Pupils studying this atlas gain a better understanding and appreciation of the task the Russians are performing. There are 32 maps in the series giving an idea of Russia's scope, her early expansion program, her physical make up, her population growth, her weather conditions, her industries, her transportation, her culture, her political make up, as well as much other information so essential in order that pupils will be able to understand Russia's part and contribution in this world conflict.

Publications of the Department of Public Instruction, Harrisburg, Pennsylvania.

**Adjusting the Public Schools to the War Effort.** 1943. 54 pp. mimeo. Suggests desirable changes in the public schools to advance the war effort.

**Counselor's War-time Guidance Bulletin.** 1942. 16 pp. mimeo. Contains occupational and educational information helpful in counseling pupils, including source materials, recorded needed test suggestions, agencies interested, and a list of war-production training courses offered in Pennsylvania public schools.

**Pennsylvania War-time Education Program.** 1942. 68 pp. mimeo. Recommendations of various communities and suggestions for implementation.

Publications of the Department of Public Instruction, Lansing, Michigan during 1942.

**On Going to College.** (12 pp. 25 cents). An aid to pupils in choosing a college if the choice of his vocation demands college training.

**Teachers' Certification Code** (24 pp. 25 cents). Lists requirements to obtain the various teachers' certificates before permitted to teach in the public schools of Michigan.

**A War-time Health Education Program for Secondary Schools.** (22 pp. 25 cents) Eight recommendations for the health education program together with suggestions for planning the program. Bibliography.

Roberts, L. J. **The Road to Good Nutrition.** Washington, D. C.: Supt. of Documents. 1942. 54 pp. 15 cents. A description of the well-nourished child and a general outline of the care needed. A general view of the nutrition problem throughout the growth of the child.

Rogers, W. W. and Welton, P. L. **Blueprint Reading at Work.** New York: Silver Burdett Co. 1942. 136 pp. \$1.28. A text to assist workers in metal trades to understand blueprints and increase their trade knowledge. Also adaptable for classroom use.

- The Rural Child in the War Emergency.** Washington, D. C.: American Council on Education, 1942. 35 pp. 10 cents. A report of a conference on child welfare held in July, 1942.
- School of the Air of the Americas.** New York: The Columbia Broadcasting System, 1942. 114 pp. A teacher manual announcing the inter-American programs for the school year, 1942-43, describing them, listing stations and other information to help the teacher carry on his essential work and to stimulate the minds and imaginations of listeners.
- Slossen, Preston. **Why We Are at War.** New York: Houghton Mifflin Co. 1942. 90 pp. 56 cents. States directly the problems of war and peace—such fundamental ideas as why men fight and what has led us to war.
- Stein, E. I. **Algebra in Easy Steps.** New York: Newson and Co. 1942. 270 pp. Cloth, \$1.28; paper, 92 cents. A carefully graded, step by step, presentation of what constitutes the usual first year's work. Includes 32 pages of answers to the problems.
- Stewart, L. O. **A Career in Engineering.** Mono. 30. Chicago: Science Research Associates, 1942. 49 pp. 60 cents. Discusses the field of engineering, what an engineer does, his needed qualifications, his possibilities for success, where the jobs are, and what the range of pay is.
- Stewart, M. S. **The Coming Crisis in Manpower.** New York: Public Affairs Committee, Inc. 1942. 32 pp. 10 cents. An excellent statement of our manpower problem with some suggestions for action.
- Stewart, M. S. and M. A. **Land of the Soviets.** St. Louis, Mo.: Webster Pub. Co. 1942. 94 pp. Necessary background material for a better understanding of Russia, her part in this war, and what can be expected of her after the war.
- Struck, F. T. **Victory Through Vocational Adjustment.** Champaign, Ill.: McDonnell and Co. 1942. 18 pp. Focuses attention on the urgency of the curriculum study of occupations in high school to meet the challenge of the shifting order of society.
- Suggested Activities for Air Raid Alert Periods.** New York: Board of Education, 110 Livingston Street. 1943. 28 pp. Lists and discusses eight principles which govern Shelter Area activities and safety. Suggests and describes activities helpful to those planning shelter programs. Also includes an annotated bibliography on play and recreation.
- Thralls, Z. A. **Understanding the Other American Republics.** Washington, D. C.: U. S. Office of Education. 1942. 32 pp. Outlines of a continuous program for implementing inter-American friendship through the schools.
- Tidewell, M. F. **Advanced Speed Typing.** New York: South-Western Pub. Co. 1943. 72 pp. 56 cents. Designed for a war-time speed-up job-preparation program. Useful for in-service training; for review and brush-up for special intensive finishing courses, and for periodic supplementary speed training.
- U. S. **Radio Goes to War.** New York: Columbia Broadcasting System. 1942. 32 pp. Free. A report of radio's part in winning the war—facts and figures interestingly presented.
- Walsh, Letitia. **The Carry-Over into Homes of the Teaching of Family Living to In-School and Out-of-School Youth.** Washington, D. C.: American Vocational Association, 1010 Vermont Avenue, N.W. 1943. 20 pp. 20 cents. Examples of carry-over, together with conclusions which should provide a distinct aid to classroom teachers in solving the problem of how to make home economics teaching carry over into the home. Thirty-three state supervisors of home economics education provided the illustrations in response to a request for evidences of student improvement in seven specified types of changed behavior. These included: improved ability to understand

- children, to get along with family members, improved work habits, buying practices, personal appearance, food practices, and increased technical skill in homemaking activities.
- Ward, D. S. and Selberg, E. M. **Youth and Jobs**. New York: Ginn and Co. 1942. 102 pp. 60 cents. Authentic, unbiased, and relatively complete information to youth on this important problem with which they are faced.
- War-time Vocational Training**. Washington, D. C.: The Chamber of Commerce of United States, Committee on Education. 1942. 8 pp. Free. Points out the need for joint action by public officials, educators, and business men and makes a series of recommendations concerning a war-time vocational training program.
- Weidner, D. E. **A General Science Workbook**. Lancaster, Penna. The Jaques Cottell Press. 1942. 216 pp. \$1.00. Organized on the unit plan (19 units), the workbook presents exercises that are practical, interesting, and thought-provoking as a means to develop skills in comparison, scientific habits, and generalizations.
- Welton, P. L., and Rogers, W. W. **Shop Mathematics at Work**. New York: Silver Burdett Co. 1942. 208 pp. \$1.56. This workbook was planned and written to meet the needs of modern machine-shop practice. Its content is based on the results of three years' research by the authors with the co-operation of men in industry, instructors of vocational subjects, and instructors of related mathematics. It is designed to function as a single source of instruction to replace the reference book plus work-sheet type of instructional material. Its content can easily be mastered by any high-school student or any adult whether or not he is a high-school graduate.
- Wilson, H. R. **Rounds and Canons**. Chicago: Hall and McCreary. 1943. 64 pp. An excellent collection of these two types of music adaptable to the voices of high-school youth.
- Wise, C. F., Sterner, L. G., and Adams, R. J. **A Way to Good English**. New York: Odyssey Press. 1942. 186 pp. 60 cents. A textbook for use in the upper years of junior high school or the lower year in senior high school. A manual and drill book giving brief, clear instruction and abundant drill on the minimum essentials of grammar.
- Wisconsin Education in National Review**. Madison: Wisconsin Education Association. 1942. 46 pp. One of the best presentations of a state's educational system from which educational needs, especially Federal aid, can be readily seen. Facts and figures shown by graphs, charts, and tables.
- Youth Looks at Science and War**. Washington, D. C.: Science Service, 1719 N. St. N.W. 1942. 133 pp. 25 cents. A collection of essays by the Washington trip winner (1942) of the First Annual Science Talent Search conducted by Science Clubs of America.
- Youth Service Councils**. Albany, New York: Department of Education. 1942. 43 pp. A plan whereby young people—16 to 25—can participate in civilian war efforts and community affairs.
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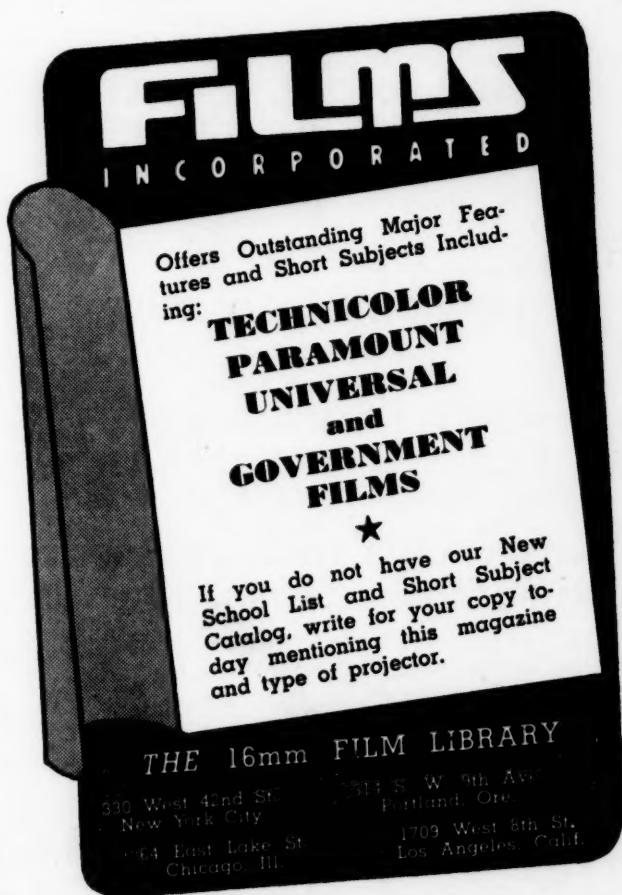
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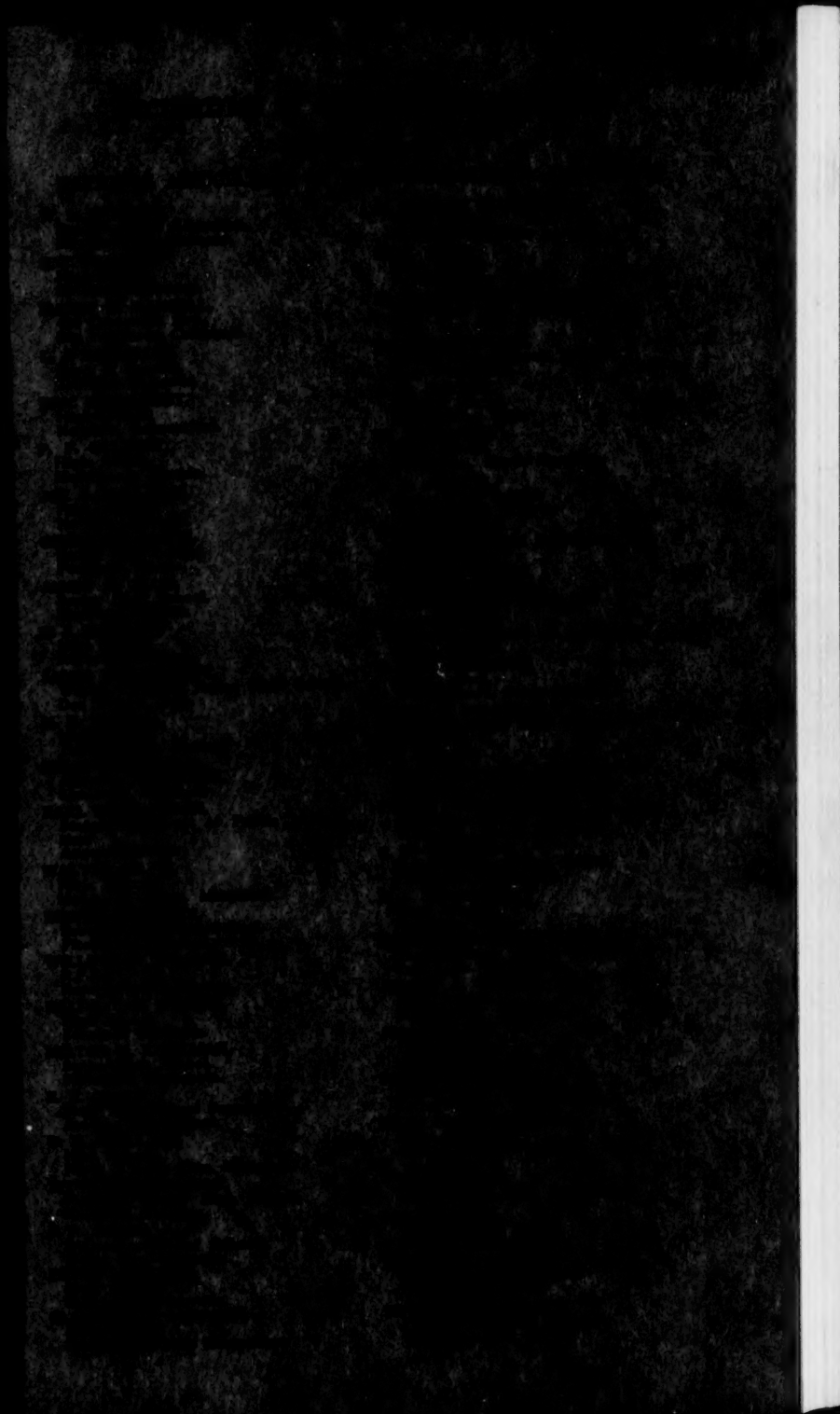
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